Temporality, selfhood and sociality: experiences of the emergent indie game developer

Neil A. Malone

BA (Hons), MSc. PGCertHE, CMgr, FCMI, FHEA

Edge Hill University

September 2021

Thesis submitted in partial fulfilment of the requirements of Edge Hill University for the degree of Doctor of Philosophy.

Declaration

This thesis is entirely my work and has not been submitted, in full, or part, for the award of a higher degree at any other educational institution.

Publication from Thesis

Elements of the thesis have formed part of the published work detailed below:

KELLY, S., KLÉZL, V., ISRAILIDIS, J., MALONE, N., and BUTLER, S., 2020. Digital Supply Chain Management in the Videogames Industry: A Systematic Literature Review. *The Computer Games Journal* [online] https://doi.org/10.1007/s40869-020-00118-0

Abstract

Temporality, selfhood and sociality: experiences of the emergent indie game developer

Neil A. Malone

Thesis submitted in partial fulfilment of the requirements of Edge Hill University for the degree of Doctor of Philosophy.

The thesis explores how individuals who independently create a new venture in the videogames industry (indies), make sense of the early entrepreneurial period prior to venture creation (nascent entrepreneurship). Via phenomenological interview, the experiences of six indie videogame developers and business owners are explored via interpretative phenomenological analysis (IPA). The study is therefore primarily concerned with exploring the experiences of indie nascent entrepreneurs. The concept of nascent entrepreneurship falls within the broader body of research on new venture creation (NVC), which in contemporary literature is perceived as a process rather than an event (Gartner and Shaver, 2012). As such, this research examines the 'entrepreneurial journey' from the position of the entrepreneurs themselves, via IPA of their individual lived experiences. The primary research question thus asks: *'How do indie videogame developers make sense of their nascent entrepreneurial journey?'*

Within academic discourse of entrepreneurship, NVC is seen as crucial (Davidsson and Gruenhagen, 2020), yet the individual experience of nascent entrepreneurship is curiously underrepresented (Gartner, 1985, Davidsson, 2016). Entrepreneurs and the ventures they pursue vary widely across different industries (Gartner, 1985) and as research on the videogames industry in the UK is at best scarce (Kerr, 2017), exploring the early entrepreneurial experiences of indies offers new insights and contributions to knowledge.

Beyond the primary research question, the entrepreneurial journey and motivational factors are also explored from work by relevant authors (Reynolds, 2005, Stephan, Hart and Drews, 2015, Tuazon, Bellavitis and Filatotchev, 2018). These further research questions posed are: '*What meaning do the dimensions of individual, environment, organisation and process in Gartner's (1985) model have for indie developers in in understanding their nascent entrepreneurial experience?', 'What antecedent motivational factors were meaningful for the participants and to what degree were dimensions of motivation present in participant accounts?', 'To what degree were motivational factors present in the*

activities of the participant nascent indie entrepreneurs?' and '*To what degree are discreet stages and transitions reflected in the lived experience of nascent indie entrepreneurs?'*

Interpretation of participant narratives illustrates several themes that provide insight into the lived experience of the emergent indie: temporality, the indie journey, selfhood and sociality. The key contribution finds that temporality and sociality are of greater importance to indie nascent entrepreneurs than previously known. The importance of temporality upon nascent entrepreneurial experience manifested via a 'Golden Age' which was perceived as a time of great positivity and opportunity. The additional importance of community, autonomy and recognition are also identified as key motivating factors for indies in the videogames industry. The findings identify a need to reconsider conceptual frameworks in entrepreneurship to specifically incorporate temporality and sociality, based on the importance placed upon them by the participants of this study.

Keywords: entrepreneurship, nascency, new venture creation, videogames, indie, interpretative phenomenological analysis

Acknowledgements

My genuine thanks to the participants of the study, all of whom were thoroughly friendly, modest and humble. Their participation was vital; hopefully they also gained something from the experience personally. It was a pleasure to engage in discussion and gain valuable insights from their experiences. My own journey since those earliest discussions has also really been quite something. To quote Douglas Adams, 'I may not have gone where I intended to go, but I think I have ended up where I needed to be.'

Thanks to my supervisory team of Professor Simon Bolton and Professor Christopher Dent for continuing to challenge me to improve this work, as well as their considered input. Thank you also to Dr Charles Knight for helping in much earlier times. From the University of Salford more recently, I would also like to thank Dr India Amos for her valuable input and feedback.

The contribution of my family has been instrumental in helping me to reach this moment. To Sarah, all my love; your patience, support, advice and inspiration have been invaluable in helping make this achievable – thank you. To Brooke and Izzy, thank you. You both make me tremendously proud – all my time with you puts a smile on my face and fills my heart with love – perhaps my journey will in some small way inspire you in the future. Thank you as well to my brother, Stephen for always being there to listen (and advise) over the many years and evolution of the study, as well as with everything else in life. And thank you to my loving mother Christine for everything, including her almost endless capacity to somehow communicate that it will all turn out alright in the end.

Contents

List of Tables

List of Figures

1. INTRODUCTION

This study explores how individuals who independently start-up a business in the videogames[1] industry (indies[2]), make sense of the early entrepreneurial period prior to venture creation (nascent entrepreneurship). The concept of nascent entrepreneurship itself falls within the broader body of research on new venture creation (NVC), which in contemporary literature is often perceived as a process rather than an event (Gartner and Shaver, 2012). More specifically, drawing upon the work of others in the field (Shane, 2012, McMullen and Dimov, 2013, Vogel, 2017, Baron and Markman, 2018), Davidsson and Gruenhagen (2020) define NVC as 'the journey from nonexistence to existence of new economic activities - rather than an event.' As such, this study uses the metaphorical concept of an 'entrepreneurial journey' to explore the transition of the individual from one place ('thinking about a business') to another (business owner) in reference to Reynolds, Bosma, Autio, Hunt, De Bono, et al. (2005). This is achieved via investigation of the individual lived experience of entrepreneurial nascency within the indie videogames industry; essentially, '*How do indies make sense of their early entrepreneurial journey?*'

Research Focus

A key feature of the research is a focus on personal meaning and sense-making in a particular context, for people who share a particular experience - those people comprise six individual indie game developers and business owners (of over 3.5 years, which Reynolds et al. (2005) call 'persistent'). Whilst a much greater and more detailed discussion of the participants of the study can be found in chapter 4, and the chief areas of study can be found later in chapter 2 (Literature Review), a summary can be articulated as the thesis being primarily concerned with nascent entrepreneurship and the indie videogames developer. Nascent entrepreneurship is concerned with exploring the transitionary process

[1] The use of the term 'video game' versus 'videogame' in contemporary culture has become somewhat contentious, despite claims it originated as one word in the late 1970s (Kohler, 2007). However, it is not the purpose of this thesis to determine the most apt or socially accepted terminology; the contentious nature of the use of 'videogame' 'video game' or 'computer' or 'digital' game in reference to games becomes distracting to the general thrust of this thesis. As such, I henceforth simply use the term 'videogame' or the more minimalist and prosaic 'game' to refer to games played on a Personal Computer (PC).

[2] The definition here of the concept of 'the indie' is used as a workable summary for introductory purposes. Whilst the term 'indie' in some senses may be considered a colloquialism of the word 'independent' it also generates and connotes alternate meanings in usage with different repercussions. A more thorough discussion and analysis can be found in Appendix 1 and the Conclusion chapter further addresses this issue in section 6.3.

that begins with an individual 'thinking about a business' and proceeds - via NVC - to culminate with an individual as business-owner. Of interest are motivational factors which, within the study of nascency, Tuazon, Bellavitis and Filatotchev (2018) explore as *antecedents* and *activities* (behaviour and experiences). Within academic discourse of entrepreneurship, NVC is seen as crucial (Davidsson and Gruenhagen, 2020), yet motivation, behaviour and the individual experience during the period that influences and precedes venture creation (nascent entrepreneurship) are curiously underrepresented, particularly from a qualitative perspective (Gartner, 1985, Davidsson, 2016). Within the field of entrepreneurship research, NVC is also noted as 'a substantial, core area where it is still possible to make many contributions that are interesting, important, and novel' (Davidsson and Gruenhagen, 2020: 22).

The second area of focus is that of the indie videogame developer themselves. Context for this study is provided via one aspect of the videogames industry as a whole - that of the indie developer (with emphasis on the UK). The indie in focus here is a lone individual or handful of individuals/friends (though this is far from universal within the indie arena) without the resources or financial capability of the established larger studios and corporate entities that comprise the bulk of a multi-billion-pound industry. Entrepreneurs and the ventures they pursue vary widely across different industries (Gartner 1985) and research on the videogames industry is scarce (Zackariasson and Wilson, 2012, Marchand and Hennig-Thurau, 2013, Melcer, Nguyen, Chen, Canossa, El-Nasr and Isbister, 2015, Marchand, 2016), especially in the UK (Kerr, 2017). Thus, exploring the early entrepreneurial experiences of indie videogame developers in the UK offers great potential for new insights and contributions to knowledge.

Six indie developers and business owners (see chapter 4) that have previously launched a game to market were phenomenologically interviewed regarding their experience as nascent entrepreneurs, which as Thompson, Locander and Pollio (1989: 138) note is 'perhaps the most powerful means of attaining an in-depth understanding of another person's experience.' The number of participants selected is typical of a phenomenological study and an IPA study in particular, because the 'detailed case-by-case analysis of individual transcripts takes a long time, and the aim of the study is to write in detail about the perceptions and understandings of these participants' (Smith, Flowers and Larkin, 2009: 50–51). Such a selection is therefore suitable because information rich participants can be chosen *purposefully* (Patton, 2002), where 'the choice would be to take that case from

which we feel we can learn the most' (Stake, 1995: 243). Chapter 4 explores this issue in greater detail.

One long-standing criticism of entrepreneurship research has been that there is often a rush to build theory, identify generalisable principles and discover universal laws, when what is perhaps required is a more methodical and patient approach of observation and detailed description (Gartner, 1985, Bygrave, 1989). This thesis seeks in part to address this criticism via a study that sets out not to build and test theory, but to explore, describe and interpret individual entrepreneurial experiences. It seeks to do so using an inductive methodological approach that does not strive to generate universal theories, but to provide valuable insights into the experiences of those individual entrepreneurs in order to generate new knowledge - to 'elicit rich, detailed, and first-person accounts of experiences and phenomena under investigation' (Pietkiewicz and Smith, 2014: 3). This 'richness' (see Smith, Flowers and Larkin, 2009, Berglund, 2015) stems from the individual, personal and empirical narrative extracts of the participants' own nascent entrepreneurial journey. With the interpretation of themes which emerge from these narratives, the research (being IPA) may cautiously move towards 'theoretical insight' (Miles and Huberman, 1994, Mouly and Sankaran, 2004, Robinson, 2014) - the motivations and experiences of the indie developer's nascent entrepreneurial journey in the videogames industry, in relation to existing models and frameworks.

In the past 40 years there has been a notable 'quantitative methodological bias' (McDonald, Gan, Fraser, Oke and Anderson, 2015: 22) in the field of entrepreneurship. Furthermore, Seymour (2006) notes that phenomenological research within the field of entrepreneurship is rare in comparison to positivist theoretical perspectives, a position also adopted by others (Cope, 2005, Heinze, 2013, Berglund, 2015). Therefore, this study suitably adopts an inductive, exploratory and phenomenological approach to capture explanations (subjective understanding and perceptions) of those on the entrepreneurial journey. The study is therefore not concerned with any attempt to find an objective reality of nascent entrepreneurship or the entrepreneurial journey, but to gain an understanding of the experience for the individual – how do they make sense of the entrepreneurial journey? This approach also aligns with recommendations within research on NVC; that there is a need for further qualitative and multidimensional research which may generate an enlightening view into the activities of the nascent entrepreneur (Gartner, 1985, Davidsson, 2016). Also, it is noted by Stephan, Hart and Drews (2015: 10) that although there is value in large-scale quantitative surveys on entrepreneurial motivation, often it is

not possible to acquire detailed information from short questions, hence their conclusion that 'of particular value are those studies that examine entrepreneurial motivation through in-depth qualitative research.'

As seen above, the driver for the research is to gain an understanding of the experience for the individual – how do they make sense of the entrepreneurial journey? As shall be discussed further in the literature review, in nascent entrepreneurship research there are several scholars who argue that a much more personal, individual exploration of entrepreneurship is required (Carter, Gartner and Reynolds, 1996, Delmar and Davidsson, 2000, Reynolds et al., 2005, Stephan, Hart and Drews, 2015, Castriotta, Loi, Marku and Naitana, 2019). Thus an alignment emerges of the study's goal of exploring personal experience and recommendations to do so from the extant literature. In order to proceed appropriately and gain insight into nascent entrepreneurial experience, a choice was therefore made to adopt a phenomenological methodological approach, which is highly suited to acquiring personal understandings. As noted by Crotty (1998: 83), it is 'an exploration, via personal experiences, of prevailing cultural understandings.' This phenomenological approach was further specified and refined into the operationalised phenomenological methodology of interpretative phenomenological analysis (IPA), as it is able to uncover a 'detailed personal account' (Smith, Flowers and Larkin, 2009)[3] of the individual lived experience. IPA is thus highly suited to 'people's understandings of their experiences' (Smith, Flowers and Larkin, 2009: 47). Beyond the individual, personal understandings, there is also an opportunity to explore narratives at not only an individual level, but also at a thematic level across the range of participants – all of whom started their own business producing videogames as independent developers. A more detailed exploration, discussion and justification of philosophical position and methodological choices along with participant selection can be found in chapter 4. With the above in mind, it is now appropriate to outline the research questions of the study:

Introducing the research questions

Whilst the research questions used within this study are introduced below, it should be noted that chapter 3 provides a much more thorough and detailed discussion of, and justification for the research questions along with an exploration of the nature of using

[3] This thesis adheres to the Edge Hill University Harvard Referencing Style Guide (Sep 2020), which stipulates that 'et al.' should only be used for citations with *more than three* authors. This is noted here as many Harvard referencing guides stipulate 'et al.' should be used for citations with *more than two* authors. Furthermore, et al. is also used in the first reference to a text when there are more than five authors, as per Harvard guidelines.

research questions in an IPA study. Therefore, whilst the research questions will appear appropriate and natural given the previous introductory discussion of the topic, it should be kept in mind that the detail and nuance of the questions will become clearer throughout the following chapters, particularly chapter 3.

In addition to the research questions below, further information is provided as to where discussion of these questions can be found later in the thesis. However, it should be noted that the findings from and interpretation of the participant narratives are the most fruitful source to answer these questions, through the voice of the participants and the IPA of their narratives. Chapter 5 is thus crucial to the understanding of the participant experience and answering the primary research question, along with the degree to which this study can attempt to answer the subsequent research questions. In addition, much of chapter 6 and 7 discuss and expand upon the prior findings. In order to maximise the value of those chapters, it is crucial to first digest the earlier findings in chapter 5.

RQ1: How do indie videogame developers make sense of their nascent entrepreneurial journey?

This research question is introduced and justified in section 3.11. It is answered through several sections of the thesis. In the main, the thematic findings themselves answer the question by revealing what it is like to be an indie and nascent entrepreneur, in particular section 5.4 and 5.5. As such, insight is provided into how they make sense of their journey. However, of additional relevance are section 6, 6.1.1 and 7.2.2.

RQ2: What meaning do the dimensions of *individual*, *environment*, *organisation* and *process* in Gartner's (1985) model have for indie developers in in understanding their nascent entrepreneurial experience?

This research question is introduced and justified in section 3.12. In terms of possible answers, it is further explored in section 6, 6.12 and 7.23

RQ3: What antecedent motivational factors were meaningful for the participants and to what degree were Stephan, Hart and Drews. (2015) **dimensions of motivation present in participant accounts?**

This research question is introduced and justified in section 3.13. It is further explored in section 6, 6.13, 6.2, and 7.23 (Implications for practice) in terms of a proposed answer.

RQ4: To what degree were Tuazon, Bellavitis and Filatotchev's (2018) motivational factors present in the activities (actions and behaviours) of the participant nascent indie entrepreneurs?

This research question is introduced and justified in section 3.14. It is further explored in section 6, 6.13, 6.2, and 7.23 (Implications for practice) in terms of a proposed answer.

RQ5: To what degree are the discreet stages and transitions in Reynolds et al. (2005) process model reflected in the lived experience of the participant nascent indie entrepreneurs?

This research question is introduced and justified in section 3.15. It is further explored in section 6 and 6.14 in terms of a proposed answer.

1.1. Organisation of the study

In order to clearly communicate the nature, scope and outcomes of the research, the study is organised in sequential chapters, with an introduction and concluding section for each chapter. The order of chapters and topics can be seen below.

Chapter 1: Introduction

This first chapter provides a brief overview and introduction to the study, outlining key terms and overall objectives (the experiences of the nascent indie videogame developer, motivation and NVC). The rationale for the study - with its focus on individual meaning-making and personal experience – is also introduced and the proposed methodology is briefly introduced in order to demonstrate suitability. The research questions are introduced, along with information as to where further justification for their inclusion can be found and where proposed answers are discussed.

Chapter 2: Literature Review

The second chapter reviews the literature, identifying trends and gaps, as well as critically reviewing the relevance and volume of existing research in the field. The literature review also seeks to situate this research within the wider body of research of NVC (itself within entrepreneurship), whilst also delineating it from said research in terms of contribution. Furthermore, key issues around entrepreneurship and motivation are introduced and discussed in relation to this study. In addition, chapter 2 helps to orientate the reader to the context for this research – the videogames industry – though also highlights the availability of significant additional literature in appendix 1 to help inform those less

familiar with the history, structure and commercial value of said industry. This chapter is essential to gain an understanding of the context of the individual participant – the nascent entrepreneurial indie videogames developer. The videogames industry is arguably still a relatively new and highly evolving media industry and so this chapter is also important for the reader to quickly orientate themselves to the context for the study.

Chapter 3: Research Questions

This brief chapter focuses specifically on the research questions. The intent is to clearly outline the value of each question and its relationship to the overall focus and goals of the study. Each research question is discussed in relation to the gaps in the literature, as well as to how it responds to calls for research. The chapter concludes with a table that illustrates how the study addresses the recommendations of extant literature.

Chapter 4: Philosophy, Methodology and Methods

This chapter explores and justifies the philosophical and methodological approach to the thesis, beginning with the philosophical position adopted, which is of importance as it impacts the direction of the study as a whole. Epistemological discussion follows and leads into the qualitative, interpretivist and phenomenological approach being brought into focus. In addition, methodological choices are explored in terms of the chosen approach and justification for the appropriateness of IPA is established. Furthermore, methods, research tools and techniques chosen to achieve the research aims and objectives are also discussed (as is the justification for such choices) along with the axiology. From an operational perspective, the tools and techniques employed and the process for acquiring, capturing and analysing participant narratives is clarified. Participant selection is discussed in detail and the individual participants are introduced, providing the initial point of departure for later understanding the findings and themes that emerge from interpretation and analysis in the subsequent chapter. Through insight into the background of the individual participants, it is possible to gain a fuller appreciation of their lived experiences and perspectives in relation to the findings, which adds greater value. This chapter also includes discussion of access and ethics, as well as a covering the purpose and challenge of analysis and the nature of cases, patterns and themes.

Chapter 5: Findings, Analysis and Interpretation

This section quickly moves directly to the findings from the fieldwork. The process undertaken enabled the production of narrative extracts to be clear and present, with full accounts of what was learned about each participant, emergent themes and ultimately

emergent themes across cases, with titles drawn directly from participant narratives: 'The Golden Age', 'A dream of independence' and 'I have this freedom'. The findings are organised thematically and within them the elements are grouped conceptually (e.g. autonomy and permission) in a case within theme manner. These findings are presented as a narrative dialogue between the participants and author, with interpretation interwoven with raw extracts, without reference to the extant literature at this point. The significant volume of the participants' narratives thus transparently illustrates the emergence of the themes via IPA. Following illustration of the themes from the participant narratives, additional interpretation and analysis is conducted to further demonstrate the key elements of temporality, sociality and selfhood – this section is of key importance to later discussion and should not be skipped. Initial reference is made to the primary research question in relation to the findings, but this is also explored in the subsequent chapter. The chapter concludes with a summary of the key findings within the themes and presents narrative extracts directly alongside themes in tabulated form for enhanced clarity.

Chapter 6: Discussion

As is typical in exploratory and IPA work, the register changes in the discussion chapter to engage with the findings in the context of existing literature. Discussion of the findings occurs in relation to the models and frameworks introduced in the literature review that helped inform the research questions. The ways in which the findings 'illuminate or problematize' (Smith, Flowers and Larkin, 2009: Ch.3, p7) existing literature, models and frameworks are explored. In addition, the concept of 'indie' is revisited here in light of the thematic findings and the participants' perspectives. The discussion emphasises the issues with existing frameworks and models in relation to the findings. The themes that are of great significance to the participants - such as temporality and sociality - are illustrated as being unable to neatly fit within existing research framework dimensions such as those of Gartner (1985). Furthermore, indie processes are demonstrated to be more nuanced than can perhaps be illustrated in the model of Reynolds et al. (2005, 2020).

Chapter 7: Conclusion

This final chapter reasserts the need for the study and reiterates the key findings. A discussion of the forms and nature of contribution then precedes discussion of the contribution itself. Specifically the contribution focuses upon: i) temporality and sociality are of greater importance to indie nascent entrepreneurs than previously known; ii) an identification of a lack of explicit consideration of temporality and sociality in Gartner's (1985) seminal framework for NVC research; and iii) an identification of the importance of

autonomy and recognition to the participants, indie nascent entrepreneurs within the videogame industry. Implications for theory, methodology and practice are discussed. Also considered is how phenomenology and IPA research can 'enlighten' practice (Berglund, 2007) and provide a complementary understanding to other, both qualitative and quantitative, approaches. Subsequently, limitations of the study are evaluated, focusing on two chief criticisms of phenomenological research (interpretation and an emphasis on the individual) which are then addressed. Next is discussion of opportunities for further and future research following this study, with reference made to a number of alternative contexts for exploration of temporality and sociality as well as the need for enhanced conceptual frameworks. Furthermore, it is suggested that the era and context explored in this study may be further investigated from the perspective of other related parties or through different lenses such as that of critical incident theory. Finally, the chapter closes with reference to the value of IPA studies and individual practitioner experience in aiding our understanding of what it is like to be an emergent indie – a nascent entrepreneur starting a journey as an indie game developer, seeking autonomy amongst a community of like-minded others.

End matter

Subsequent to chapter 7, the bibliography is provided prior to appendices that include further information on the history, structure and value of the videogames industry (appendix 1) and example narrative extracts from interviewed participants (appendix 2).

1.2. Summary

This chapter has justified and outlined the focus of this study. In addition, research questions have been introduced along with a description of how the thesis is organised. This chapter is necessarily an introduction, and all of these areas shall be revisited and explored in further detail throughout the research. As such, it is now appropriate to move forward to a review of the relevant literature. Naturally it is of importance to review the body of work in the field of entrepreneurship for relevance. However, it is also beneficial to briefly discuss the literature concerned with the videogames industry - both are examined in the next chapter.

2. LITERATURE REVIEW

This section begins by articulating the goals of the literature review. Subsequently the context of the study is provided briefly, in order to aid understanding of the role and position of the indie developer. Such exploration is valuable because it provides the context for the thesis and brings forth clarity on the focus of the study – the indie developer – and how they fit in to the wider industry. It is pertinent to an interpretivist study such as this, using as it does a qualitative approach in IPA as the methodology, to suggest that the role of the literature review is not to provide the basis for a hypothesis, but rather to enable an awareness of the literature; to become, as Glaser and Strauss (1967) describe, 'theoretically sensitive.' As such, the literature review does indeed explore the models and frameworks relevant to the topic explored. However, in a phenomenological study, it is important to remain aware that explanations should not be imposed before the phenomenon has been understood 'from within' (Smith, Flowers and Larkin, 2009) - that is to say, from the participants own sense-making and experience. Therefore, following on from discussion of the indie in context, there is an exploration of NVC, nascency and motivation within the field of entrepreneurship, including frameworks and models from these topics. These areas are the focus for the study overall in researching the individual lived experiences of the indie developer.

2.1. Literature review: goals

The previous introductory chapter specified in broad terms the scope and fields of enquiry that would be studied, as well as introducing some of the concepts to be explored. The literature review serves to fulfil many more criteria. At a basic level, the purpose of the literature review is to assemble and provide an overview of relevant information, articulate existing research and situate this study in relation to that existing body of knowledge. However, If we are to explore the purpose of the literature review more thoroughly and draw upon arguments put forward by Phillips and Pugh (2012), the literature review serves further purposes. Firstly, the literature review helps to **identify trends** in research activity that are relevant to this study, including **recognising the gaps in current research** that this study may proceed to address. Secondly, the literature review also serves to **critically evaluate the volume and relevance of others' contributions** in this field, defining areas of empirical and theoretical weakness in order to support the aforementioned research goals. Thirdly, as previously mentioned, this chapter will clearly **situate this research** within broad

disciplines, however it will also simultaneously **delineate this study** from other existing studies.

As a component of the research process, the literature review explores and assesses existing scholarly work in the fields relevant to the thesis. A wide variety of authentic sources are reviewed, including scholarly books, journal articles and research papers. However, other pertinent sources such as industry focused websites, magazines and reports are also utilised for the purpose of reviewing the current state of the industrial environment (the videogames sector), as this is less frequently explored by scholarly work as noted earlier.

2.2. Videogames: industry research and indie context

In addition to exploring the substantial volume of academic work on entrepreneurship, it is important to acknowledge the empirical context for the study – that of the videogames industry and the indie developer within. However, to understand this context, it is beneficial to have an appreciation of academic interest in videogames more generally, in order to both situate this study within the broader multidisciplinary field of videogames research and to demonstrate a lack of empirical studies on business and the videogames industry. However, the nature of such a wide-ranging contextual discourse does not naturally focus specifically on the participants of this study - indie entrepreneurs. Thus a significant volume of background information and discussion on this topic can be found in appendix 1. The reader is encouraged to read appendix 1 (although it is not a *requirement* to understand the focus and contribution of this study). Appendix 1 therefore serves as a valuable source of information for those who feel they would benefit from a more in-depth understanding in this area.

Gartner and Shaver (2012) argue context (industry) is important to understanding entrepreneurship. As such, the context of the indie videogame developer within the industry is important to understanding entrepreneurship in this study. Therefore, what follows below is a very brief exploration of videogames industry research and the indie in context, with the more detailed discussion of research on videogames and the sector more generally located in appendix 1.

As noted above by Phillips and Pugh (2012), in terms the literature review, there are several key goals (identify *relevant trends in research activity*, *gaps in current research*, *volume and relevance of others' contribution*, *situate this research, delineate this study*).

These goals are addressed in detail with regards to entrepreneurship in the next section, yet it is also valuable to explore them briefly in relation to relevant existing videogames research and the industry, which is undertaken below.

2.2.1. Videogames industry research

Growth in the academic literature on videogames has not focused on the industry (Kerr, 2006, 2017, Zackariasson and Wilson, 2012, Marchand and Hennig-Thurau, 2013, Melcer et al., 2015, Marchand, 2016), yet the evolution of game studies over the past twenty years has fuelled much academic enquiry in other areas (e.g. psychology, narratology/ludology, media effects, violence, education, learning, literacy and more – see appendix 1 for illustrative texts). Indeed, Zackariasson and Wilson (2012: 1) note that 'this industry has attracted surprisingly little attention from researchers of business and economics.' However, seminal work by Kerr (2006) in the area of videogames and business has been revisited more recently (2017), expanded and updated in a global context with regards to production, circulation and policy. Although small start-up ventures are acknowledged in this text, as might be inferred from the title *Global Games*, they are not the focus and little attention is paid to them or indies. Perhaps such a lack of focus on indies is due to the difficulty of defining them (see p. 13-14 below), although there has more recently emerged a number of works in this area (Whitson, Simon and Parker, 2018, Juul, 2019, Ruffino, 2020). Whilst these are presently few in number (and also demonstrate there remains scope for further exploration of the indie entrepreneur), they nevertheless provide evidence of an emerging body of work on the indie, to which this study contributes.

Of the above texts, Ruffino's (2020) edited volume includes a wide range of topics related to indie, including diversity, VR, social networks, geography and more. However, many chapters focus on production processes as distinct from venture creation. As such, whilst it is a welcome addition to this emerging field of literature, there is less relevance to nascent entrepreneurship directly. Whitson, Simon and Parker's (2018) work looks at the indie once again with a focus on production of the product over new venture. However, of some relevance is the argument put forth that small indie studios have dispensed with the need of many traditional production requirements, despite a continued need. They argue that 'missing producer' work is still required by indies, but undertaken by others - merely shifting the work of the traditional publisher rather than eradicating it in the name of indie. As such, there is discussion of production processes and the concerns and challenges that such present. However, these issues do not manifest in the narratives of the participants in

this research, yet it is worth noting that the indie developers of Whitson, Simon and Parker's (2018) study seem somewhat larger than those smaller entrepreneurial ventures presented in this thesis. Nevertheless, there is one observation made which aligns with participant narratives in this thesis, that 'success' is considered by many to be the ability 'to sustain ongoing creative and collective processes' (Whitson, Simon and Parker, 2018: 6) although this thesis is not an exploration of a success discourse.

2.2.2. Indie context

Whilst an appreciation of the videogames industry as a whole is useful to aid understanding of this study, said industry is vast and multifaceted; it is not particularly helpful to attempt to cover all aspects of it in order to help explore the experiences of indie developers (as such, further detail can be found in appendix 1 which provides background information on the history, value and structure of the industry as well as further exploration of the emergence and definitions of indie). Nevertheless, a brief understanding of who and what is meant by indie is essential to this thesis – they are the focus and participants! To move forward then, it is useful to clearly establish which entrepreneurs and videogames with which this study is concerned, and it is also useful to make an effort to establish what is meant by the term 'indie.'

Strict definitions of indie remain contentious and multifarious (see Gnade, 2010, Dutton, 2012, Lipkin, 2012, Parker, 2013, Phillips, 2015, Grabarczyk and Garda, 2016, Baker, 2018). Despite many sources seeking to define the indie (Costikyan, 2000, 2005, King, 2005, Martin and Deuze, 2009, Juul, 2019), they never adequately do so. There are a variety of considerations when determining what indie means and the concept is used to refer to a wide range of facets that may or may not make something, or someone, indie. For example, in terms of the number of people involved in creating a videogame, is a business with more than just a founder, indie? Can a business with 12 staff be indie? What about 250? 1,000? At what size is a business not indie? Can a developer ever be an indie if they have a publisher? Does an indie game need to be made in under a month, or does it need to take 10 years? It is an inexhaustible list and these questions are rhetorical; they are used here to demonstrate that – as those authors mentioned above often unintentionally illustrate - there are many criteria for consideration, yet few easy ways to provide boundaries or a conclusive answer to what is, or is not, indie. However, through analysis of individual indie narratives (the participants), this study puts forward a case which adds to the overall debate (see the section titled 'But what about indie?' in the Discussion chapter

for more on some potential answers to these questions and conclusions on this topic). Nevertheless, whilst it is therefore difficult to give definitive answers to questions such as those above, this study recognises the need to adopt a position on what is meant by 'indie' in order to undertake research. As such, this study perceives indie as a spectrum upon which some cases are stronger examples than others, with different factors adding or removing weight to the degree of 'indie-ness' (a more detailed and nuanced discussion of such a perspective, taken from the indie film industry – can be found in the section *indie counterculture* within appendix 1).

Whilst 'indie as a spectrum' is useful and appropriate, greater precision is valuable to conduct and comprehend this study, particularly in relation to the focus of the thesis (entrepreneurship and new venture creation). As such, one specific area stands out as being more central in the literature - that of financial independence. Kerr (2017) notes that typically indies are not owned nor dependent upon a publisher, with many self-publishing via digital distribution services. Others (DellaFave, 2013, Sullivan, 2013, Gordon, 2019) also note that the most distinguishing feature of the indie in terms of differentiating from large studios is typically that they are self-funding to a variable, but often large degree. In this regard, Juul (2019) agrees, seeing the indie as being in charge of their own destiny, with 'the capability to make games more personal in the absence of a publisher holding monthly sprint goals over their head' (Kunzelman, 2020). However, whilst the importance of self-funding to indies (in the context of entrepreneurial new venture creation) is acknowledged, it is argued in this thesis - supported by participant evidence (see chapter 5, Findings) - that it is not just the means, but also the *methods* of production that are paramount to the indies in this study. This argument is presented in detail in the section titled 'But what about indie?' in the Discussion chapter.

2.3. Entrepreneurship

As has been outlined above, research on the videogames industry is scarce (Zackariasson and Wilson, 2012, Marchand and Hennig-Thurau, 2013, Melcer et al., 2015, Marchand, 2016), especially in the UK (Kerr, 2017). It is therefore appropriate to explore academic literature regarding entrepreneurship, both generally and in relation to the videogames sector. Doing so is both valuable and necessary in order to develop an appreciation of the trends, gaps and contributions within the field relevant to this study and its focus.

2.3.1. The contemporary development of entrepreneurship research and definitional challenges

Whilst recognition of the term entrepreneur in a business sense dates back to Cantillon (1680-1734) in eighteenth-century France, it is arguably the last forty years that have seen the most significant rise of entrepreneurship as a much-discussed area of research and theory development. During this recent period, entrepreneurship as a field of study and discipline has also developed considerably in terms of scale and scope (Low and MacMillan, 1988, Low, 2001). Furthermore, and more specifically within the UK, the espousal of enterprise culture by the Conservative government of the late 1970s and early 1980s (Coffield and MacDonald, 1991) also promoted discussion and awareness of entrepreneurship more generally. Subsequent governments have continued to emphasise the role and importance of entrepreneurship (Della-Giusta and King, 2009), not least to the national economy. Indeed, entrepreneurship has been identified as a force that shapes the economic landscape, a 'major driver of economic growth' within which 'one in six of all adults in the world are directly involved' (Reynolds and Curtin, 2004, Reynolds et al., 2005: 205,226). As such, with wide-ranging academic, economic and political discussion of entrepreneurship and its prevalence within UK governmental policy, one would expect a clear definition and understanding of the entrepreneur to be readily apparent.

It is fair to say that in academia, there has been a struggle to find a single, commonly agreed definition of entrepreneurship (van Praag, 1999, Thurik and Wennekers, 2004, Reynolds et al., 2005). In 1969, Cole failed to define the entrepreneur despite a decade of trying (Cole, cited in Gartner, 1988). Thirty years later, it would seem the issue was still unresolved as Low (2001: 17) expressed his frustration at the 'disproportionate and unproductive time we spend trying to define entrepreneurship'. Around a further ten years later still, Casson (2010: 3) made the claim that entrepreneurship should be regarded as the 'key building block of an integrated social science' yet believed it had perhaps been overlooked as such, in part because 'there has been disagreement over the most appropriate definition of the entrepreneur' (2010: 4). The field of entrepreneurship has notoriously struggled with a precise definition of the entrepreneur and entrepreneurship. Indeed, asking what defines an entrepreneur has notably been referred to as missing the point (Kilby, 1971, Gartner, 1988). Many different claims have been made as to what makes someone an entrepreneur and yet just as many have been refuted. For example, there are definitions of entrepreneurship that adopt an economic perspective, such as that of Ronstadt (1984: 28), who claimed entrepreneurship is 'the dynamic process of creating

incremental wealth.' Yet whilst wealth generation may well be important for many creative and artisanal entrepreneurs within the videogame industry, it is doubtful - from the literature, anecdotal evidence and as this study later illustrates - that it is the chief or sole motivating factor for all indies. Is wealth generation the chief concern of most painters, sculptors, poets, playwrights and dancers? Perhaps for some (and it may be difficult to know accurately how many), it may well be, but for many it may not be, and even if it is, does this mean that as a criterion it should sit high atop a definition of entrepreneurship? Arguably, wealth generation for many indies is not the motivator (Harris, 2017, Gordon, 2019), and some believe the original indie philosophy was in fact in opposition to financial gain (see *The Scratchware Manifesto* in appendix 1).

Given the multifaceted definitions and attempts to define entrepreneurship and the extent to which others have already tried, focusing on and making substantial progress towards 'who' or 'what' is an entrepreneur here may well be difficult given half a century of recent attempts that have ultimately resulted in a focus on the process. Furthermore, it is not the focus of this study to make attempts to define entrepreneurship, and contemporary academic literature is largely in agreement that the 'who' or 'what' has been replaced with the 'how' (the process). Nevertheless, it is accepted that adopting a recognised perspective on the meaning of entrepreneurship at least provides greater clarity for this research. Therefore, for the purpose of this study, Gartner's (1988) perspective is most closely adopted – and has since been further accepted (Brahma, Tripathi and Bijlani, 2018, Ramoglou and Tsang, 2020) - which concerns itself with a broad definition, but one which focuses upon new venture creation (NVC). The entrepreneur, therefore, is *one who seeks to create a new venture.*

This view of entrepreneurship as NVC is also adopted by the twenty-year international research program GEM (The Global Entrepreneurship Monitor research program) as 'the most appropriate focus of entrepreneurial research' (Reynolds et al., 2005: 209, Reynolds, 2020). Nevertheless, it must be remembered that, as noted by many others, entrepreneurship 'is not an event or an outcome; it is a process that takes place through time' (Gartner and Shaver, 2012: 660). Whilst it is useful to explore previous literature in the area of defining entrepreneurship, it is of more value - at least in terms of avoiding verbosity and maintaining relevance to this study - to review the literature in the areas most pertinent to early entrepreneurial experiences.

2.3.2. Nascent entrepreneurship

As a field of research, nascent entrepreneurship stems from the early work by Reynolds (Reynolds and Miller, 1992, Reynolds and White, 1992) and also the significant influence of Gartner's work (Gartner, 1985, 1988, Katz and Gartner, 1986) that argued for a re-orientation of entrepreneurship research towards behaviours in the process of emergence. As a research field, it was a new concept within the broader reach of venture creation research, yet grew significantly to generate extensive research programs that have, as of 2020, accumulated close to three decades worth of data (Global Entrepreneurship Monitor (GEM) (Reynolds, 2020), Panel Study of Entrepreneurial Dynamics (PSED I) (Gartner, Shaver, Carter and Reynolds, 2004) PSED II (Reynolds and Curtin, 2008)).

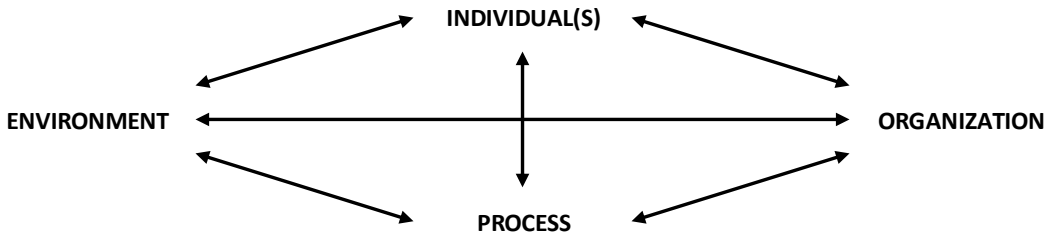
A framework for NVC

As a research field, NVC is significant, but can be initially attributed to Gartner (1985) who noted that it is a complex and multifaceted phenomenon. He further noted that between industries, the differences between entrepreneurs and their ventures can be much greater than expected. He goes on to say that individual actions and environments are diverse and that there is not one 'well-worn route marched' by entrepreneurs creating new ventures (ibid: 697). It is also noted that generalisable findings that could be applied to all individuals across all environments and all organisations do not exist; that the process of entrepreneurship is heterogeneous (Gartner and Shaver, 2012). Nevertheless, it is acknowledged that there may be specific variables that describe how new ventures are created (Gartner, 1985). As such, there is value in investigating the activities and individuals within a specific industry (e.g. videogames) to explore this variety and difference.

Although an older paper, Gartner's framework (1985) is nonetheless still considered a seminal work (Brahma, Tripathi and Bijlani, 2018, Davidsson and Gruenhagen, 2020) and along with Low and MacMillan's (1988) paper (which also highlighted process as a key dimension), a landmark in NVC research. In the framework (see Figure 1 below), it is suggested there are four dimensions for describing NVC, individual, environment, organisation and process. It proposes these dimensions as a format for future research as well as demonstrating how previous work can be organised around these dimensions. For example, internal locus of control, risk taking propensity and need for achievement are all considered within the *individual*, whilst *organisation* includes examples such as differentiation, franchise entry, supply shortage and licensing. The argument put forth is that all of these dimensions are important if the new venture is to be 'adequately described and classified' within entrepreneurial research (1985: 698) and that they all are linked

(again, see Figure 1 below for more detail). Gartner therefore advocates a multidimensional approach and this study also adopts this stance, researching the participants' experience of all these dimensions, with a key interest in the *individual* and the *process* (primarily, whilst nevertheless acknowledging the additional multidimensional aspects of *environment* and *organization*). The *individual* motivational factors are also explored, in conjunction with activities conducted as part of the process that leads towards NVC.

Figure 1: Gartner's framework for describing NVC
(Gartner, 1985: 698)



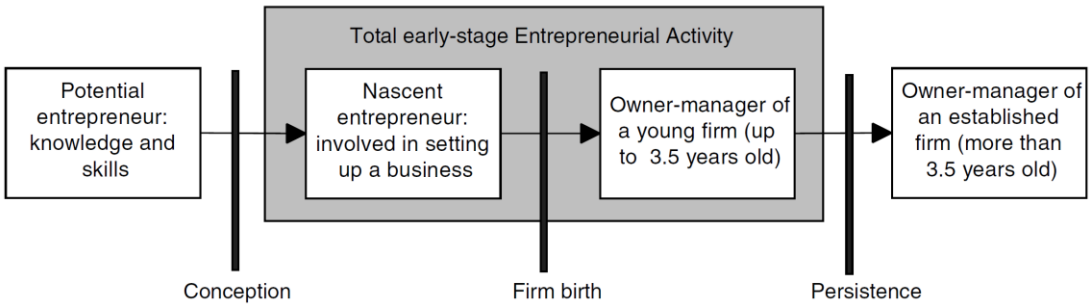
NVC, emerging organisations and the nascent entrepreneur

Since Gartner's framework, the study of emerging organisations over the past 20-30 years has been undertaken via a myriad of different viewpoints, where 'terms and theoretical perspectives have proliferated, creating a field that is highly fragmented and dispersed' (Castriotta et al., 2019). In addition to nascent entrepreneurship, some further examples of such terms are *new entry, the creation of new enterprise, the creation of new organisations, the act by which new firms come into existence* and *emerging organisations* (Castriotta et al., 2019). Nascent entrepreneurship however is closely focused on the 'embryonic moments of emerging organisations' (Castriotta et al., 2019: 420), which aligns with the goals of this study to focus on the early period of the participants' entrepreneurial journey, rather than more pragmatic areas traditionally associated with the operational tasks of NVC and business start-up.

To introduce the concept of the nascent entrepreneur, it is useful to look at NVC as a process (Lumpkin and Dess, 1996), with distinct phases and transitions. In the example below (Figure 2), Reynolds et al. (2005: 210) illustrate such a process. The first stage represents potential entrepreneurs, those individuals who are 'just talking about it'. It is not until they have 'initiated some entrepreneurial start-up activities' that they are considered nascent entrepreneurs - where they transition through a 'typical entrepreneurial barrier' (ibid) of conception from potential to nascent entrepreneur.

The third stage in the process considers the entrepreneur to have become an owner-manager of an operational business, after the second transition, termed here the 'firm birth'. Reynolds et al. (2005) offer interpretations of the 'birth event' (Katz and Gartner, 1986, Reynolds and Miller, 1992), which may be justified from intention (e.g. searching for information, having an idea), crossing boundaries (registration, launching), resources (employees, premises) or exchanges (transactions, customers). Finally, the fourth stage is considered to be that of an owner-manager of an established firm (the criteria being positive cash flow covering all expenses for over 3.5 years). Each of these stages can be seen in Figure 2, below:

Figure 2: Entrepreneurial process and GEM operational definitions
(Reynolds et al., 2005: 209)



However, there is an argument to suggest there is no instantaneous point at which the potential entrepreneur regenerates as a nascent entrepreneur or the venture suddenly materialises where it did not before – each evolves. To reiterate a position from earlier, entrepreneurship 'is not an event or an outcome; it is a process that takes place through time' (Gartner and Shaver, 2012: 660). This is further supported by Johnson, Parker and Wijbenga (2006: 3) noting that 'formation is a process, involving a series of decisions, rather than a single decision taken at a particular point in time.' Therefore to claim a new venture is created or conceived at a specific point seems somewhat at odds to the suggestion by others that it evolves. This is an area which is further explored with the participants in chapter 5 via their own personal, individual experiences.

As this thesis is focused upon the experiences of the entrepreneur prior to NVC, it is the first and second stages of the GEM defined process that are of interest and relevance (termed here the 'potential entrepreneur' and the 'nascent entrepreneur') and examined in more detail. Stages one and two are of primary interest; the firm birth is not the focus

(providing the participant actually establishes a firm – see section 4.42, *Participant selection* in chapter 3 for further elaboration).

Initial delineation of these stages is limited to a distinction between 'contemplation on setting up a business… talking about it' in the first stage and initiating some 'entrepreneurial start-up activities' in the second stage (Reynolds et al., 2005: 210). More specific criteria are implied but are not necessarily evident. Those who self-identified as 'currently trying to start a new business' were also asked if they have done anything to help start that business, such as looked for a location or equipment, worked on a business plan, begun saving money or – and this is key – 'any other activity that would help launch a business' (Reynolds et al., 2005: 214). Reynolds later articulates this slightly differently in stating the nascent entrepreneur is 'active in start-up behaviour in the last 12 months' (Reynolds, 2020: 16). However, neither provide clarity and both provide much room for interpretation; so how does one clearly distinguish between a potential and nascent entrepreneur? Reynolds et al. (2005, 2020) provides no definitive answer yet maintains there is a legitimate distinction.

Whilst this analysis of the GEM definitions in Reynolds et al. (2005) may appear pedantic or unnecessarily critical in specificity, it is important because it illustrates once again the problems with attempting to clearly and neatly define entrepreneurship. Furthermore, it also illustrates that there may be no clear transition point or critical incident (Chell and Pittaway, 1998) between the claimed stages of potential and nascent entrepreneur if the 'conception' transition is as ambiguous as 'thinking about' / 'doing', which is a fuzzy and arbitrary distinction. The definitions are nebulous, yet conceptualised as distinct stages, phases and definitions.

Such lack of specificity implies that the criteria for distinguishing between a potential and nascent entrepreneur is one of self-analysis as to what constitutes 'trying to start a business' or conducting 'an activity that would help launch a business' (Reynolds et al., 2005). Yet it is also noted that asking individuals if they 'are currently starting a business' is an ambiguous question in terms of data collection and that there is also a 'lack of precision associated with ordinary use of the phrases "start-up" and "company" in all languages' (ibid 2005: 214–215). Therefore, further exploration of the individual nascent entrepreneur's journey is required.

The individual as nascent entrepreneur

In trying to accurately define the nascent entrepreneur, we naturally reach the same challenge as when attempting to define the entrepreneur generally – the 'hunt for the heffalump' (Kilby, 1971). Therefore, whilst a variety of definitions have been offered of the nascent entrepreneur (see Wagner, 2006, Castriotta et al., 2019 for summaries), all are as fallible to the very same criticisms levelled at attempting to define the entrepreneur. For example, Wagner (2006) compiles several sources to arrive at a definition of the nascent entrepreneur, yet the summary specifies (amongst other requirements), that to be considered a nascent entrepreneur, one must have no more than three months cash flow to cover expenses and salary. Why three months? Why not one, or eight or ten? No explanation is provided, yet to exclude those that could (for example) provide a salary for four months, seems arbitrary.

Perhaps a more helpful definition is that nascent entrepreneurs are 'individuals… taking steps to found a new business but who have not yet succeeded in making the transition to new business ownership' (Carter, Gartner and Reynolds, 1996: 151). Admittedly there are terms here that are broad in scope, but this definition is less arbitrary and more workable. As we define the entrepreneur by what they do, this study likewise defines the nascent entrepreneur in the same manner, by their behaviour; that is to say, a nascent entrepreneur is one who is beginning to act entrepreneurially. Nevertheless, merely thinking about a potential business idea could be considered as 'beginning to act entrepreneurially' or 'taking steps' and so it is important to remain cognisant that nascency may be interpreted as truly embryonic in this conceptualisation.

Gartner and Shaver (2012: 663) define the nascent entrepreneur as one with 'active involvement in a start-up one expects to own' whilst Delmar and Davidsson (2000: 1) describe them as 'individuals trying to start an independent business.' Although providing more insight, neither is any more specific in its criteria for the nascent entrepreneur. However, due to the context of this study (the indie game developer) it is nevertheless interesting and of relevance that the notion of independence is raised - indeed, this is central to core ideas regarding entrepreneurship as a phenomena (Davidsson, 2016), and is revisited below in terms of multidimensional typologies (Stephan, Hart and Drews, 2015).

This thesis therefore adopts the position that the current state of knowledge and classification regarding entrepreneurial activity pre-venture creation can be enhanced and built upon via further exploration and interpretation – that there is an opportunity to

further explore the concept of nascent entrepreneurship. Indeed, entrepreneurship may perhaps be better reconceptualised prior to NVC as an amorphous process with shifting parameters; the metaphorical 'entrepreneurial 'journey' that is experienced differently by each participant. It is hoped that the interpretative phenomenological analysis of indies to be conducted (those who have experienced this process and state) may further contribute to this body of knowledge.

Antecedents

The behaviour of the nascent entrepreneur in focus occurs during NVC. Therefore, exploration is centred upon how indies make sense of their entrepreneurial journey during the period prior and leading up to the creation of that venture. In terms of research within the field of nascent entrepreneurship, Tuazon, Bellavitis and Filatotchev (2018) divide this into three stages: *antecedents, activities* and *outcomes*, which can be seen below in Table 1.

Antecedents are factors that may lead an individual to act entrepreneurially to establish a new venture. Research in this area tends to focus upon questions such as, 'What motivates a nascent entrepreneur to begin a new venture?' Indeed, Castriotta et al. (2019) note that literature on NVC demonstrates that there are close links between nascent entrepreneurship research and individual characteristics such as motivation.

Table 1: Nascent entrepreneurship - antecedents factors
Adapted from (Tuazon, Bellavitis and Filatotchev, 2018)

1)	**Motivational factors**[4]	**2)**	**Individual-level resources and characteristics**	**3)**	**Institutional factors.**
a)	financial success	a)	Personality traits	a)	Political dimension
b)	independence	b)	General demographics	b)	globalization forces
c)	self-realization	c)	business experiences	c)	business networks
d)	social contribution	d)	personal values	d)	market dynamism
e)	desire to innovate	e)	Cognitive abilities	e)	regional determinants
		f)	Biases	f)	cultural dynamics

As can be seen above in Table 1, Tuazon, Bellavitis and Filatotchev (2018), state that antecedents comprise three factors, specifically: motivational factors, those affecting individual-level resources and characteristics and institutional factors. The first antecedent

[4] Tuazon, Bellavitis and Filatotchev (2018) draw these motivational factors from Carsrud and Brännback (2011)

factor of nascent entrepreneurship is of interest and relevance to this research: what motivates nascent entrepreneurs and what are the motivational factors?

Tuazon, Bellavitis and Filatotchev (2018: 12) also provide a useful overview of antecedents to nascent entrepreneurship with specific regards to motivation which is worth revisiting here. Firstly, whilst some motivational drivers such as a desire for independence and financial success seem attractive to both nascent entrepreneurs and non-entrepreneurs (Edelman, Brush, Manolova and Greene, 2010), there are differences between nascent and non-entrepreneurs according to Baron (2007) and Carsrud and Brännback (2011). Secondly, nascent entrepreneurs appear to prioritise monetary goals differently and are less interested in roles and recognition (Carter, Gartner, Shaver and Gatewood, 2003), but feel a stronger need to solve business problems and create early in life. Nascent entrepreneurs also appear to test their ideas and do not rely on lay knowledge – they appear to have a different cognitive approach to NVC (Curley and Formica, 2013, Reymen, Berends, Mauer, Stephan and Burg, 2015, Prandelli, Pasquini and Verona, 2016).

Whilst all of the above is of interest to both this study and study of nascent entrepreneurs generally, it should be noted that some specifics sometimes lean towards the traits of the nascent entrepreneurs, rather than their behaviour, and it is towards the latter with which this study is concerned, but more specifically the experience – especially given previous criticisms of the issues surrounding trait theory. Nevertheless, antecedent motivational factors are of interest and do emerge in participant narratives, specifically with regards to independence and social contribution.

Activities

This stage typically focuses upon what nascent entrepreneurs actually do (e.g. Aldrich & Yang, 2014; Honig & Samuelsson, 2012; Wright & Marlow, 2012). What activities do indies conduct during nascency? What are their behaviours during the nascent development of the venture and how did they experience them? The level of intensity with which they undertake activities during this nascent period has also been explored. Carter, Gartner and Reynolds (1996: 151–152) studied longitudinal data from over 1,500 individuals and found that what nascent entrepreneurs do in their day to day activities both matters and impacts outcomes. By organising their results via three activity profiles ('started a business', 'gave up', 'still trying'), they found that those who operated at a lesser level of intensity were more likely to be 'still trying' 6 - 18 months later. Even those that 'gave up' had been operating at a greater level of intensity despite perhaps not having the creativity to make

their ideas work, or perhaps they had the wisdom to realise their ideas were not sustainable.

Outcomes

Whilst not the focus of this research, outcomes are a part of the framework of Tuazon, Bellavitis and Filatotchev (2018) and are also connected to the periphery of the main study, hence discussed in brief here. One perhaps obvious potential outcome of nascent entrepreneurship is the creation of a new venture, and this is an important aspect of research into nascent entrepreneurship generally. However, it is also true that disengagement is a potential outcome, as DeTienne (2010) notes in discussion of entrepreneurial exit as a critical component of the entrepreneurial process.

Engagement and disengagement thus provide the two key possible outcomes. Within these two outcomes, Tuazon, Bellavitis and Filatotchev (2018) believe that engagement is influenced by commitment, purpose, resource attraction and focus on performance, whilst disengagement is influenced by resource deficiency, negative perception of outcomes, leadership issues and technical difficulties. Nevertheless, the focus of this study is on antecedents and activities, and whilst insights may be gained in relation to the influences on outcomes, for the purposes of this study, it is enough that the outcome for the participants is that they have indeed created a new venture.

A rationale for study and an existing literature gap

Nascent entrepreneurship is an important, yet underexplored area of research lacking holistic investigation, as we shall see below. Tuazon, Bellavitis and Filatotchev (2018) noted several shortcomings of existing nascent entrepreneurship research, with two relevant in particular.

Firstly, much prior nascent entrepreneurship research has focused on either methodological challenges or contribution to economic development, without focusing on actions prior to venture creation. As previously noted, this study addresses this issue by exploring individual experiences of the *activities* and *antecedents* to start-up.

Secondly, Tuazon, Bellavitis and Filatotchev (2018) also note that existing research focuses upon specific stages of nascent entrepreneurship separately (antecedents, activities or outcomes), without a holistic multi-stage perspective:

> *little research has been conducted to understand* ***how different individuals approach the nascent entrepreneurship journey in different***

> ***ways.*** *Studies bridging the gap between antecedents and activities would greatly contribute to the literature. (emphasis added) (Tuazon, Bellavitis and Filatotchev, 2018: 25)*

As such, there are several opportunities here for further research to explore hitherto uncharted areas of nascent entrepreneurship and this study aims to do exactly that – explore how indies (in detail via IPA) make sense of the entrepreneurial journey in individual, different ways. Furthermore, IPA elevates the potential to gain a view of nascency (antecedents, activities *and* the links between them) from different individuals through its holistic focus on the sense-making derived from the lived experience.

In discussing entrepreneurship research design, Davidsson (2016: 90–91) argues that there must be 'explicit consideration of new venturing within or associated with' the studied entity, and that preferably the research should also pay some form of attention to *antecedents* too. This study adheres with this argument and fulfils such requirements. By exploring the individual lived experiences of nascent entrepreneurs, this study aims to address some of the shortcomings in the current literature mentioned above. Across the three stages (and in particular the first two), there is scope to better understand how indies make sense of their experiences of the nascent entrepreneurial journey towards NVC. By lived experience, the definition of Smith, Flowers and Larkin (2009: 60) is used here, 'relatedness to, or involvement in, a particular event or process (phenomenon)'; it is 'the meaning which the participant makes of that experience' (ibid: 117).

2.3.3. Entrepreneurial motivation

In understanding how indies make sense of their nascent entrepreneurial journey, it has been discussed how antecedents and activities are of interest and that of the antecedents, motivational factors are important (Tuazon, Bellavitis and Filatotchev, 2018). As such, it is useful to further explore existing literature on entrepreneurial motivation.

Amit and Muller (1995) note that studying entrepreneurial motivation is not an easy task. Similarly, in discussing motivation at length, Bird (1993) also recognises that studying entrepreneurial motivations is challenging not only because age and experience are key factors, but because motivation may change over time once initial goals have been achieved. Nevertheless, despite such forewarning and challenges, there are a number of typologies in this area that may offer help in understanding the motivations of those to be studied.

Stephan, Hart and Drews (2015) categorise all existing research on entrepreneurial motivation into four key areas: typologies, individual drivers, contextual drivers and consequences. Typologies are split into three streams: opportunity-necessity, multi-dimensional and growth ambitions; of these streams, the first two are relevant to this study.

Opportunity-necessity (also known as Push versus Pull)

The main thrust of the opportunity-necessity conceptualisation is that individuals experience one of two general motivations to engage in entrepreneurial activity.

1. **Opportunity (Pull)**, a positive framing whereby the idea of an entrepreneurial activity is so appealing that it lures the individual away from their current situation or job.
2. **Necessity (Push)**, whereby the individual is dissatisfied or feels pressure to exit their current situation in order to become an entrepreneur, or perhaps does so after a job loss.

Although the conceptualisation had been brought to light prior (Shapero and Sokol, 1982, Cooper and Dunkelberg, 1987, Feeser and Dugan, 1989), it was brought to significant attention by Amit and Muller's (1995) paper, which focused exclusively upon this area. In the opportunity scenarios, it was believed that individuals may feel a new venture offers more rewards than the current employer provides, or perhaps the individual had presented their venture idea to their current employer, but they were rejected. Conversely, necessity entrepreneurs are those individuals that may feel frustrated with their employer in a number of ways, or perhaps that their employers were not 'doing things the right way' (1995: 69). Alternatively, perhaps these individuals did not feel challenged in their current role. Amit and Muller (1995: 67) argue that opportunity entrepreneurs are more successful in creating and managing their venture than necessity entrepreneurs.

Following earlier research and in conjunction with the GEM survey, research by Bosma, Wenneckers and Amorós (2011) differentiated a subset of opportunity-driven motivation termed *improvement-driven* motivation (those seeking to increase their independence and freedom) and note that it is higher in innovation driving economies such as the UK. However, Stephan, Hart and Drews (2015: 12) note that this differentiation has not yet been explored by those 'investigating drivers or consequences of entrepreneurial motivation.' This is of note not only because it is an area that has yet to be further

explored, but because it is relevant to this study in terms of increasing independence, manifesting as autonomy for many participants (see sections 5.2. and 5.3).

Whilst the opportunity-necessity conceptualisation may offer some insights, Dawson and Henley (2012) note that although the concept is useful, it is ambiguous and does not necessarily incorporate the nuances of why people choose to become self-employed. They claim greater clarity is needed for identifying the motives of entrepreneurs, 'for example, does a financial motive indicate 'push' (current financial distress) or 'pull' (the perception of a lucrative market opportunity)?' (2012: 714). Furthermore, Stephan, Hart and Drews (2015) note that such a binary differentiation oversimplifies what are actually complex motivations underlying entrepreneurship; indeed, both aspects can be present in the motivations for some individuals. As such, a more nuanced and *multidimensional* typology would prove useful.

Multidimensional Typologies

In this second identified stream, the underlying typology of entrepreneurial motivation can typically be identified within one of four common dimensions (Stephan, Hart and Drews, 2015), namely:

1. **Achievement, challenge & learning** – personal development, meaningful work, self-realisation and fulfilment of personal goals.
2. **Independence & autonomy** – control over work content, decisions, time and processes.
3. **Income security & financial success** – the importance of financial return.
4. **Recognition & status** – social status, critical acclaim and perception within the industry.

Whilst much research has been conducted on entrepreneurial motivation in terms of these dimensions, it is noted by Stephan, Hart and Drews (2015) that profiling entrepreneurs on combinations of these dimensions is scarce. As such, with a phenomenological research approach that seeks to gain a holistic understanding of the experience and how indies make sense of this entrepreneurial journey, this study helps to shine light in this area. Furthermore, as already noted the lack of research generally within the videogames industry also offers an opportunity to build upon these pre-existing dimensions in terms of their applicability.

In addition to the above four dimensions, Stephan, Hart and Drews (2015) also discuss three less researched dimensions (family and roles, dissatisfaction and community/social motivations). It is noted that with a similarity to necessity-driven motivation, dissatisfaction is often neglected by researchers within the field, yet it is evident amongst several of the participants, in terms of their experience prior to indie game development (discussed in terms of themes 2 and 3, chapter 5).

2.3.4. Entrepreneurial intention

In the 1980s, several authors (Shapero and Sokol, 1982, Shapero, 1984, Bird, 1988) elevated the importance of the concept of intentionality, at least in the context of entrepreneurship, which later become a popular area of inquiry within the field (Liñán and Fayolle, 2015). This evaluation of entrepreneurial intention recognised and focused upon the often-complex relationships between ideas, opportunities and outcomes and thus further directed the focus away from earlier obsession over traits and contexts. Bird (1988) sees the concept of intentionality as the state of moving an idea forward - via action - from inspiration to manifestation, or more precisely:

> *Intentionality is a state of mind directing a person's attention (and therefore experience and action) toward a specific object (goal) or a path in order to achieve something (means). (Bird, 1988: 442)*

Therefore, according to Bird (1988), intention is more than goal setting or deciding a course of action and operates at a higher level, as a framework. It is considered to include 'intuition and contextualisation within a holistic approach to venture creation' (Bird, 1988: 443). However, entrepreneurial intention is not limited to creating new ventures. Bird (ibid) argues that it can be perceived via the dimension of locus of control; via internal locus of control (the intentions of the entrepreneur), or through external forces, e.g. intentions of other stakeholders, markets etc. (Katz and Gartner, 1986).

Intentionality therefore acts as a useful lens through which to analyse an individuals' approach to venture creation, in particular the perception of locus of control – whether for example, a participant believes control resides with them as to whether they can in fact successfully launch a business, or whether for example it was 'out of their hands.'

The Theory of Planned Behaviour

A second strand of research on entrepreneurial intention stems from social psychology and the work of Azjen and Fishbein (1980) and more prominently, Ajzen's (1985, 1991) Theory

of Planned Behaviour (TPB), which noted that 'psychological research suggests that the relationships between intentions and actual behaviour are not always that strong' (Delmar and Davidsson, 2000)

At its core, TPB is concerned with the intention to perform any given behaviour. Intention is defined as the 'motivational factors' (Ajzen, 1991: 181) that contribute to just how much effort an individual is prepared to make to undertake the behaviour. We should note therefore, that intention is not a direct synonym for motivation and that intention is only likely to transfer into behaviour if it is within the individual's control. Whilst this may sometimes be the case, Ajzen notes that the performance of most behaviour:

> *depends to some degree on such non-motivational factors as availability of requisite opportunities and resources (e.g., time, money, skills, cooperation of others…). Collectively, these factors represent people's actual control over the behavior. To the extent that if a person has the required opportunities and resources, and intends to perform the behavior, he or she should succeed in doing so. (Ajzen, 1991: 182)*

TPB recognises therefore that resources and opportunities available impact upon achievement. TPB also offers scope to better understand motivational factors so is therefore of use to this study. However, beyond this TPB is arguably less useful to this study due to it focusing more on the 'perception of behavioural control and its impact on intentions and actions' (Ajzen, 1991: 183) rather than the source of antecedent motivational factors and intentions. Nevertheless, there remains scope to later reflect upon the participants' journey in terms of their motivation in relation to locus of control.

More contemporary research on entrepreneurial intention links with opportunity, arguing intention and opportunity are meaningless without each other (Mishra and Zachary, 2014). However, it is also noted that early work such as that of Bird (1988) places an overemphasis on opportunity (Mishra and Zachary, 2014) and as such has received criticism in this regard. Furthermore, with regards to criticism of intentionality, it is also of interest to go back and explore Gartner's views. He argues that focusing on intentions is 'just another variation on the trait theme' (1988: 60) in arguing how can one, for example 'distinguish personal goals from goals of profit and growth'?

Despite criticism, entrepreneurial intention offers a useful way of understanding motivational factors in relation to venture creation and may also provide further insight

into the entrepreneurial experience of nascent entrepreneurs. However, intention must be examined with caution in order to avoid the seduction to create a 'psychological profile' (Gartner, 1988) of the entrepreneur.

2.3.5. The entrepreneur in the thesis

As has been seen above, one approach to understanding the entrepreneur is that they are defined not by who they are, but by what they do - through the act of being entrepreneurial. Unlike for example an accountant or lawyer, one does not pass an entrepreneurship exam to become an entrepreneur and therefore we cannot easily use a qualification to identify the entrepreneur. Therefore, the argument presented here and that is utilised throughout this study is that an entrepreneur is not something one is – entrepreneurship is something one does. An entrepreneur has thus been defined as one who seeks to create a new venture, as proposed by Gartner and others (Gartner, 1988, Reynolds et al., 2005, Gartner and Shaver, 2012, Reynolds, 2020). It is one who goes through the *process* of NVC. Therefore, this criterion must be applied to any potential participants for this study. However, how do we know if an individual seeks to create a new venture? This poses a difficult question to answer. A list of activities to act as checklist may never suffice or apply to all those who have attempted to create ventures – there may be an infinite number of possible routes on the entrepreneurial journey that do or do not lead to business ownership. Therefore, it is pragmatic to choose participants by being yet more specific; by choosing only those that in fact do own an established business that they did not inherit; those that have transitioned from (at some point) non-business owner, to (now) business owner. They therefore meet the criteria of having at some point experienced the entrepreneurial journey as a matter of fact. As such, Reynolds et al. (2005) definition of 'persistence' is adopted for this purpose, one who has operated as a business owner for over 3.5 years. By including the requirement of being a business-owner at the point of selection criteria (further discussed in context of participant selection and methodological issues in chapter 4), a homogenous group suitable for research begins to coalesce, which is an important consideration for an IPA study.

2.3.6. Entrepreneurial experience

Via IPA, this study provides insights into the experience of the nascent entrepreneur and it is therefore worth noting there are a small number of other studies which also explore the entrepreneurial experience, albeit unrelated to NVC. Whilst the context is less relevant to this research, Cope's (Cope and Watts, 2000, Cope, 2005, 2011, Kempster and Cope, 2010)

studies of entrepreneurial learning and leadership are most prominent in this regard and their methodological approach is relevant to this study.

Cope (2005) explores phenomenology as methodology through use of the 'phenomenological interview' (Thompson, Locander and Pollio, 1989) to research entrepreneurial learning and the role of critical incidents, finding it to be a highly useful methodological approach for gaining 'insight into the activities and perceptions of entrepreneurial individuals' (Cope, 2005: 182) and further notes its value in widening research perspectives and experimentation. In a later study, Cope (2011), not only once again articulates the importance and value of phenomenological research (in this case explicitly IPA), but also demonstrates how themes can emerge and be illustrated from participant narratives. Whilst entrepreneurial learning (in this case from failure) is the topic again, there are profound insights gained from the participants whose ventures failed. The participants' lived experience – shown via direct narrative extracts – build the three themes of the costs, process and outcomes of venture failure. Furthermore, there is additional relevance to this study in the discussion of 'journey as metaphor.' He notes that if such metaphor is to be considered useful, 'then further research is required to understand what this journey entails' (Cope, 2011: 606). As such, this thesis explores that journey of the nascent entrepreneur – the process of new venture creation – and demonstrates what it 'entails' through the themes explored in the chapter 5 and further argued in chapter 6.

Further exploration of entrepreneurial experience is conducted by Clarke and Holt (2019), whom ask entrepreneurs to draw an image of their venture prior to verbal explanation. They argue that imagery can enhance an entrepreneur's sensemaking capacity and communicate disparate or seemingly contradictory ideas in a way that language typically cannot with its linear and rational structures. Via interpretation, they argue that drawing can thus be an innovative and valuable way of accessing the entrepreneurs understanding of the lived experience. As such, there is recognition here that the language used by participants may not always be able to fully capture their experiences neatly and clearly - thus interpretation is crucial.

A further study is relevant to this research in terms of phenomenological approach and entrepreneurial experience. Rehman and Azam Roomi (2012) explore the experiences of women entrepreneurs in Pakistan to identify that work-life balance is one of the most significant motivating factors for the participants. They also identify a number of themes

via IPA: conceptualising work-life balance, motivational drivers, challenges and strategies. These themes may indeed bear relevance to those emerging from this study.

In an exploration of entrepreneurship as experience, Morris (2015: 1) discusses a potpourri of entrepreneurial concepts and constructs within entrepreneurship research to argue that 'no two individuals experience entrepreneurship in the same way.' It is suggested that this is due to the multifaceted ways with which an entrepreneur may interpret and react to events. He goes on to conclude that there are many complex factors involved in the entrepreneurial experience, but that the chief implication is a 'need to approach entrepreneurship as a journey over time' (Morris, 2015: 4); which resonates with the approach undertaken by this research.

2.4. Summary

In order to provide an understanding of existing research in the fields relevant to the goals of this study, this review of entrepreneurship literature has explored several key areas. Firstly, following an introduction to the field of entrepreneurship generally, existing research on nascent entrepreneurship literature has been explored and relevant models and frameworks have been discussed. Subsequently, entrepreneurial motivation was examined along with typologies of research and common dimensions applied to research in this field. These areas were followed by a brief exploration of the concept of entrepreneurial intention, in relation to locus of control. By focusing in these areas within the larger fields of motivation, NVC and entrepreneurship, it is hoped that a greater degree of specificity and direction will aid and enlighten data gathering in acquiring rich primary research data.

As a phenomenological and interpretative study, it is important not to make assumptions nor hypothesis now, but to realise the goal is to uncover the essential understandings of the participants – the meanings they associate with their experience. It is hoped that by exploring motivation and nascency within entrepreneurship, valuable insights may be acquired regarding the antecedents to NVC, as well as the experiences specific to the entrepreneurs participating in the study. It is therefore crucial that there should not be an effort to develop explanations before the phenomena has been explored and understood from the perspectives of the participants, or as Moran (1999) expresses, 'from within.'

2.4.1. The literature gap: entrepreneurship, the videogames industry and the indie

In closing this chapter and summarising much of the above in terms of previous research, it is useful to explicitly note the gap within existing literature which this study addresses. Specifically, whilst there have been extensive academic studies concerning videogames, few focus on the industry, as noted by many authors (Kerr, 2006, 2017, Zackariasson and Wilson, 2012, Marchand and Hennig-Thurau, 2013, Melcer et al., 2015, Marchand, 2016). Those academic texts that do focus on the industry tend to focus on the large multinational companies operating at a global level (as noted by Kerr, 2006, 2017). Despite recent evidence of the cultural, commercial and technological impact of indies on the industry (Whitson, Simon and Parker, 2018, Juul, 2019, Ruffino, 2020), they remain curiously absent from much academic attention, as does exploration at a more local level. As such, this study addresses this gap whilst also adding to this emerging body of work on indies, through exploration of their experience of nascent entrepreneurship and NVC, focusing on indies in Europe (and predominantly in the UK). In terms of the entrepreneurship literature, it has been shown that context is crucial (exploring less researched industries) as entrepreneurs within different industries experience NVC differently (Gartner and Shaver, 2012). In this sense then, a study of underexplored entrepreneurs (indies), within an industry neglected by research, provides great scope for contribution to new knowledge.

3. RESEARCH QUESTIONS

Many scholars (Robson, 2002, Gray, 2013, Saunders, Lewis and Thornhill, 2015) stress the significance of a clear research question and acknowledge the importance of research design overall:

> *Research methods texts… consistently argue that a clear research question and/or research objectives supported by a convincing rationale that is justified by the academic literature is an essential building block for high quality research. (Rojon and Saunders, 2012: 1)*

Here then, the chief research question is outlined and justified, along with further research questions and the overall rationale. However, it should be noted that in an IPA study, the creation of the primary research questions are not normally theory-driven (though theory may engage with secondary research questions), but that they are 'directed towards phenomenological material; they focus upon people's understandings of their experiences' (Smith, Flowers and Larkin, 2009: 47). As such, they note that IPA literature reviews are therefore often 'short and more evaluative than most' (Smith, Flowers and Larkin, 2009: 43), though they nevertheless acknowledge that the literature review helps to further specify the literature gap to be addressed. Yet the field of entrepreneurship is vast and even that of NVC alone is significant in volume. Consequently, there has been a need to review literature to provide a more precise focus within the field of entrepreneurship. That focus rests upon the key areas of investigation for studying indie videogame developers in the thesis: **entrepreneurial nascency, motivation** and the holistic **lived experience.** At this point, it is therefore useful to summarise the key gaps within the reviewed literature and introduce the research questions to address those gaps. Table 2 below summarises the recommendations in the literature and explains how this study addresses those recommendations.

3.1.1. Need for the study: exploring RQ1 - The emergent indie experience

The core thrust of the research focuses upon gaining deeper insights into the process of nascent entrepreneurship for the individual indie videogame developer. This thesis therefore adopts the position that the current state of knowledge and classification

Table 2: Addressing recommendations of extant literature

Area	Recommendations of existing literature	This study
Field of study	Entrepreneurship research should focus on new venture creation (Gartner, 1988, Davidsson and Gruenhagen, 2020)	Focuses on nascent entrepreneurship, a notable area of enquiry within NVC
Data collection and analysis	In the entrepreneurship literature, there has been a quantitative bias and there is a need for further qualitative research (Gartner, 1985, McDonald et al., 2015: 22, Davidsson, 2016)	A qualitative, inductive, exploratory study
Theoretical perspective	Positivist perspectives dominate the field of entrepreneurship (Seymour, 2006), thus calls for a wider range of theoretical perspectives, specifically more phenomenological research (Cope, 2005, Seymour, 2006, Heinze, 2013, Berglund, 2015)	Phenomenological and thus interpretivist in nature
Methodology and Focus	In nascent entrepreneurship research, a personal, individual exploration of entrepreneurship is required (Carter, Gartner and Reynolds, 1996, Delmar and Davidsson, 2000, Reynolds et al., 2005, Stephan, Hart and Drews, 2015, Castriotta et al., 2019)	Interpretative phenomenological analysis (IPA) - highly suited to 'people's understandings of their experiences' (Smith, Flowers and Larkin, 2009: 47) and acquiring personal understandings (Crotty, 1998)
Context	In entrepreneurship research, generalisable findings that can be applied to all individuals across all environments do not exist – thus there is a need for studies that explore less researched industries (Gartner and Shaver, 2012).	Videogame industry is noted as highly lacking in research in business and finance, particularly within Europe (Kerr, 2006, 2017, Zackariasson and Wilson, 2012, Marchand and Hennig-Thurau, 2013, Melcer et al., 2015, Marchand, 2016). Accordingly, the context of this study is a less researched industry - indies within the videogame industry (focus on UK)

regarding entrepreneurial activity pre-venture creation can be enhanced and built upon via further exploration and interpretation – that there is an opportunity to further explore motivational factors and the lived experience of the entrepreneurs within nascent entrepreneurship. Indeed, entrepreneurship may perhaps be better reconceptualised prior

to NVC as a unique process for each individual; an entrepreneurial *journey* that is experienced differently by each participant. The justification for this aspect of the research and the chosen approach can be provided through several arguments.

Firstly, nascent entrepreneurship is a notable area of inquiry within the field of NVC, which is agreed should be a core focus of entrepreneurship research generally (Davidsson and Gruenhagen, 2020). In addition, contemporary research in the field has moved beyond inconclusive behavioural approaches and outdated definitions via traits, to arrive at definitions that centre upon entrepreneurship as a process of NVC (Gartner, 1988, Amit and Muller, 1995, Reynolds et al., 2005, Gartner and Shaver, 2012, Baron and Markman, 2018, Reynolds, 2020). As such, this study's exploration of nascent entrepreneurial indie videogame developers aligns with both considerations and recommendations of existing literature in the field (see Table 2 above); that is, exploring NVC is the focus of this entrepreneurial research, and that focus on NVC adopts the position that it is indeed a process – perceived here as a journey.

Secondly, several experts within the field (Carter, Gartner and Reynolds, 1996, Delmar and Davidsson, 2000, Reynolds et al., 2005, Castriotta et al., 2019) recognise that nascent entrepreneurship is very much about the individual experience of entrepreneurs and therefore what is required is a personal, individual exploration of entrepreneurship. This position is also supported by Stephan, Hart and Drews (2015) whom note the rich insights into the activities of the nascent entrepreneur that can be gained through such a focus; that is to say, participant descriptions of experiences that are their own and deemed important to them. A fundamental aspect of this study therefore recognises and engages with this position and seeks to address this issue via interpretative phenomenological analysis (IPA) as it's methodological approach, which is perfectly suited to the task of uncovering a 'rich and detailed personal account' (Smith, Flowers and Larkin, 2009) of the entrepreneur's individual lived experience.

Thirdly, in the past forty years, entrepreneurship research has demonstrated a notable 'quantitative methodological bias' (McDonald et al., 2015: 22) and academics have called for further research on NVC from a qualitative and multidimensional perspective, (Gartner, 1985, Davidsson, 2016). The methodological approach of this study towards NVC and nascent entrepreneurship therefore helps to address this bias, building upon a number of earlier pioneering studies in the field that successfully adopted a qualitative approach as the sole method of inquiry, as evidenced in and by Cope (2011).

Fourthly, not only are there calls for further qualitative research generally in the field of entrepreneurship, but specifically for phenomenological research too. Seymour (2006) noted that phenomenological research is welcomed, as it is typically rare within the field in comparison to positivist theoretical perspectives - a position also adopted by others (Cope, 2005, Heinze, 2013, Berglund, 2015).This research therefore also seeks to address this issue, focused as it is upon the individual entrepreneur and their personal experiences via a phenomenological approach (IPA), which as Crotty (1998) notes, is highly suited to acquiring personal understandings.

Fifthly, it has been noted that there is a need for further studies that explore industries that have received less attention from entrepreneurship researchers, as each industry provides scope for a different environment - generalisable findings that could be applied to all individuals across all environments and all organisations do not exist, and entrepreneurship is heterogenous (Gartner and Shaver, 2012). Individual actions and industries are diverse, and the videogames industry is also unique. There is therefore a strong argument that research in this area within the videogames industry is valuable as this industry differs from other industries and furthermore, whilst videogames have generated a substantial volume of academic literature in several fields, it has received surprisingly little academic focus in terms of business and economics (Zackariasson and Wilson, 2012, Marchand and Hennig-Thurau, 2013, Marchand, 2016). Kerr (2017: 11) also notes that 'we need a greater empirical and theoretical input from scholars about games production in Europe.'

To summarise, based on both the recommendations of academics within the field of NVC and as a result of the gaps within the literature, the chief research question therefore must address process, personal experience, qualitative inquiry, multidimensional exploration, holistic understanding of nascency and also be situated in the context of an industry (videogames) that is lacking entrepreneurship research. In order to undertake such, 'making sense' and 'meaning making' are the key constructs to be explored via the participants' lived experience in this IPA study in order to reveal what Smith Flowers and Larkin (2009) term 'rich, detailed insights.' As such, with a qualitative, inductive, exploratory, interpretative and phenomenological approach, the primary research question is thus:

RQ1: How do indie videogame developers make sense of their nascent entrepreneurial journey?

This research question is answered through several sections of the thesis. In the main, the thematic findings themselves answer the question by revealing what it is like to be an indie and nascent entrepreneur, sections 5.4 and 5.5 in particular. As such, insight is provided into how they make sense of their journey. However, of additional relevance are sections 6, 6.1.1 and 7.2.2.

3.1.2. Exploring RQ2: existing theory – NVC

Research questions 2 through 5 are focused on exploring nascent entrepreneurship in relation to existing theory. However, as IPA is not typically used to build theory, it should be noted that the likelihood of addressing these questions will chiefly reside in discussion of analysis, as noted by Larkin and Thompson (2012):

> *IPA does not test hypotheses, and is not usually used to build theory per se – but its analytic outcomes can be used to open up a dialogue with extant theory. It is useful to have a few more refined or theoretically informed questions, but to treat these as 'secondary' – because they can only be answered at the discussion stage. (Larkin and Thompson, 2012: 103)*

It should be noted therefore, that these research questions serve to direct the study but that in an IPA study they are not hypothesis to be tested and they make assumptions about what the data can reveal, which from an open qualitative study, may not in fact be answerable. This is the reason IPA studies focus on a primary research question, with secondary research questions either emerging from the data, or engaging with theory (Smith, Flowers and Larkin, 2009). IPA studies have primary research questions that focus on 'people's understandings of their experiences…questions need to be directed towards meaning (rather than 'difference' or 'causality' as a hypothesis would be)' (Smith, Flowers and Larkin, 2009: 47).

RQ2 focuses on NVC in relation to Gartner's (1985) framework, which was introduced earlier in the literature review. Although an older paper, it is considered a seminal work (Davidsson and Gruenhagen, 2020) and along with Low and MacMillan's (1988) paper which also highlighted process as a key dimension, a conceptual landmark in NVC. As this study focuses on the process of NVC through exploring the nascent entrepreneurial experience, it may well be valuable to explore the experiences of the participants in terms of the framework; that is to say, to what extent and how do the framework's variables

(individual, environment, process, organisation) appear to interact with the individual's experience of NVC. These dimensions may provide a useful lens through which to explore the experiences of the participants and their journey.

RQ2: What meaning do the dimensions of *individual*, *environment*, *organisation* and *process* in Gartner's (1985) model have for indie developers in in understanding their nascent entrepreneurial experience?

In terms of possible answers, this research question is further explored in sections 6, 6.12 and 7.23.

3.1.3. Exploring RQ3: existing theory – motivational factors

Castriotta et al. (2019) note that literature on NVC demonstrates that there are close links between nascent entrepreneurship research and individual characteristics such as motivation. However, existing entrepreneurial motivation research often falls into oversimplification, according to Stephan, Hart and Drews (2015) when in fact greater clarity is needed for identifying the motives of entrepreneurs (Dawson and Henley, 2012). In corroboration of these observations and in order to examine this area more closely, Tuazon, Bellavitis and Filatotchev (2018) suggest that motivational factors are one component of antecedents within nascent entrepreneurship. As such, it may be useful to evaluate the motivational factors that emerge from the participants' narratives not in isolation, but in relation to the other factors and components suggested by Tuazon, Bellavitis and Filatotchev (2018); which are present and which (if any) appear to demonstrate significant meaning for the participants?

Research into entrepreneurial motivation often recommends a multidimensional approach (Gartner and Shaver, 2012, Stephan, Hart and Drews, 2015), which is adopted by this study. Furthermore, according to Stephan, Hart and Drews (2015), the underlying typology of entrepreneurial motivation can typically be identified within one of four common dimensions (see below). Whilst they also claim much research has been conducted on entrepreneurial motivation in terms of these dimensions, they note that exploration of entrepreneurs on *combinations* of these dimensions is scarce. Furthermore, in relation to the nature of this study and this area of inquiry, they also note that 'of particular value are those studies that examine entrepreneurial motivation through in-depth qualitative research' (Stephan, Hart and Drews, 2015: 10). As such, via this study's qualitative, phenomenological research of the individual lived experience, it may well be possible to

gain a greater holistic understanding of how indies make sense of this entrepreneurial journey through a combination of different motivations. As such, the following research question is posed:

RQ3: What antecedent motivational factors were meaningful for the participants and to what degree were Stephan, Hart and Drews (2015) dimensions of motivation present in participant accounts?

- **Achievement, challenge and learning**
- **Independence and autonomy**
- **Income security and financial success**
- **Recognition and status.**

This research question is further explored in sections 6, 6.13, 6.2, and 7.23 (Implications for practice) in terms of a proposed answer.

3.1.4. Exploring RQ4: existing theory – activities and intention

The above discussed motivations may be explored in relation to the activities (actions and behaviours) disclosed by the individual participants and also any recognised intentional behaviours. Much prior nascent entrepreneurship research has focused on either methodological challenges or contribution to economic development, without focusing on actions prior to venture creation (Tuazon, Bellavitis and Filatotchev, 2018). In addition, many previous studies are claimed to focus on individual stages of nascency in isolation. Therefore, 'studies bridging the gap between antecedents and activities would greatly contribute to the literature' (Tuazon, Bellavitis and Filatotchev, 2018: 25). Thus by exploring motivational factors and activities, this study helps to address both of these issues and leads to the following research question:

RQ4: To what degree were Tuazon, Bellavitis and Filatotchev's (2018) motivational factors present in the activities (actions and behaviours) of the participant nascent indie entrepreneurs?

This research question is further explored in sections 6, 6.13, 6.2, and 7.23 (Implications for practice) in terms of a proposed answer.

3.1.5. Exploring RQ5: existing theory – nascency

The Reynolds et al. (2005) model of the entrepreneurial process may provide a starting point for understanding nascent entrepreneurship, but as previously discussed, it also includes much ambiguity in its efforts to define the nascent entrepreneur and the stages through which they may progress. The model holds nebulous definitions of the 'potential' and 'nascent' entrepreneur, yet it conceptualises each within distinct stages, despite it not necessarily being possible to clearly articulate at which stage an individual entrepreneur may reside. Whilst this may mirror earlier challenges of trying to define the entrepreneur, Johnson, Parker and Wijbenga (2006: 3) emphasise that 'formation is a process… rather than a single decision taken at a particular point in time' and as such, it is the process that is the focus here. In addition, many others call not for divided, segmented and neatly classified explorations of nascency in entrepreneurship, but suggest there is a need for more holistic and multidimensional research (Stephan, Hart and Drews, 2015, Tuazon, Bellavitis and Filatotchev, 2018). This study therefore attempts to springboard from Reynolds et al. (2005) ideas to provide an understanding that transcends a discreet stage process to provide a more holistic understanding of the participants lived experience in terms of their overall nascent entrepreneurial journey.

RQ5: To what degree are the discreet stages and transitions in Reynolds et al. (2005) process model reflected in the lived experience of the participant nascent indie entrepreneurs?

This research question is further explored in sections 6 and 6.14 in terms of a proposed answer.

3.2. Summary

Extant literature has been referenced throughout this chapter to evidence the rationale for the research questions and clarify the purpose of the thesis. Table 2 (above) provides a concise summary of the recommendations of literature and how they are addressed by this study; thus reiterating the need for this research.

4. PHILOSOPHY, METHODOLOGY AND METHODS

In closing the previous chapter, the research questions were outlined in detail and the focus of the study on the nascent entrepreneurial experience of indies was stated as the primary research question. A rationale for the study and a suitable methodological approach of IPA was also introduced and is explored in more detail in this chapter, along with further justification of IPA's appropriateness to exploring the lived experience of the participants. The literature review also demonstrated the importance of this topic for further research – including the absence of any significant volume of academic investigation into the precise subject in the given context. In this chapter the overall research philosophy is discussed along with the methodological approach and specific methods employed. As noted by Crotty (1998), it is important to remain cognisant of the correlation between epistemology, theoretical stance, methodology and methods; that each is related and potentially influences the other. Moving forward thus, it seems pertinent at this point to discuss the philosophical perspective of the study in relation to the research questions, overall philosophical position and research design.

4.1. Research philosophy and design

The research design is elucidated in detail throughout the chapter, though in essence it encompasses a framework of interpretive, phenomenological research that utilises and is informed by IPA to gather data via semi-structured interviews. The data analysis is conducted based on the individual stages of IPA as articulated by Cope (2011), described in detail in section 4.6, (*Analytic process*), which are themselves derived from the key IPA text of Smith, Flowers and Larkin (2009). This results in a robust and structured yet flexible process of analysis to explore the phenomena of nascent entrepreneurship for the participants of this study, indie game developers.

The goal of the research is not to make predictions or validate hypotheses, but to generate an interpretation of indie developers' nascent entrepreneurial journey. The study is not a search for the 'truth' - such as one might believe could be found if we ask enough developers the best time, place and method for creating a new venture we can determine how to do so successfully on every future occasion - rather, an effort to gain valuable insights into the lived experience of nascent indie entrepreneurs and how they make sense

of their journey to NVC. As Cope (2011: 608) states, 'the strength of a qualitative research design such as this lies in its capacity to provide situated insights, rich details and thick descriptions' of the participants' experience. It is a personal, individual account that is made rich via process and context (Hjorth, Jones and Gartner, 2008). Therefore the intention, as with IPA in general, is not to create theories to be tested, but to gain insight and understanding into how the participants make sense and generate meaning (Smith, Flowers and Larkin, 2009) from their experience as fledgling indie developers. Regardless, even if this study sought to find causal links in a positivist manner, one hundred observations of an individual entrepreneur resulting in a similar outcome would not make it universally 'true' in any sense:

> *Popper (1968) … suggests that no theory can ever be proved simply by multiple observations, since only one instance that refutes the theory would demonstrate it as false. (Gray, 2013: 22)*

4.1.1. Justifying a qualitative approach

Whilst a quantitative approach may well be appropriate for some areas of entrepreneurship research, it is less so for understanding lived experience and subjective meaning that is socially constructed (Saunders, Lewis and Thornhill, 2009). Individuals hold certain perceptions, rather than 'facts' about the nature of the entrepreneurial journey and it is their experience that is sought to be captured; the focus is on the qualitative and exploratory aspects of the research, the experience and perception of the developers themselves.

As has been previously noted, contemporary research on entrepreneurship and new venture creation within the videogames industry is lacking and qualitative research is generally underrepresented within the field (Zackariasson and Wilson, 2012, Davidsson, 2016, Kerr, 2017). Positivist approaches have traditionally dominated entrepreneurship research (surveys have been the dominant approach to primary research) and in the past 40 years there has been a notable 'quantitative methodological bias' (McDonald et al., 2015: 22). There is therefore much scope for a qualitative, interpretivist and inductive study. Furthermore, the qualitative focus offers more mileage, being as it is, concerned with understanding and experience. As mentioned above, this research is not a search for 'a truth' but to better understand how indies make-sense of and experience the

entrepreneurial journey. It is therefore more about the perspectives of these developers and how they experience nascent entrepreneurship within the context of NVC. To use an analogy, there is less interest here in knowing how people voted than why they chose to vote that way – this study attempts to illuminate meaning-making. A qualitative approach suitable for focusing upon 'nuances' and 'themes' (Silverman, 2004: 10) is thus suitable. Furthermore, my interest was originally piqued by complex and less tangible concepts of entrepreneurship, independence and motivation. Finally, the fact that the theoretical perspective is interpretivist (see below), presents a qualitative approach as consistent and cogent.

Addressing generalisability

Whilst IPA can cautiously move 'from the particular to the general' (Smith, Flowers and Larkin, 2009, Eatough and Shaw, 2019: 51), transferability or generalisability of results beyond the participants is not necessarily sought and it is recognised that a qualitative study with a small number of participants may inhibit generalisability (Kisfalvi, 2002, Anderson and Miller, 2003, Kempster and Cope, 2010, Cope, 2011). Yet not producing a generalisable result does not necessarily deter such a course of action; knowing the views of developers themselves is in and of itself interesting, valuable and useful. As Kempster and Cope (2010) note, a qualitative and in particular IPA study, can make a 'different, yet equally valuable' contribution to the field, that does not 'risk superficiality by seeking breadth over depth' (Conger, 1998). Indeed, the strength of such a qualitative research design – and an interpretative phenomenological analysis - is its ability to provide deep insights and rich descriptions of the experiences of the participants (Jack and Anderson, 2002, Kempster and Cope, 2010). Smith, Flowers and Larkin (2009) however note that theoretical generalisability may well be possible from a small number of cases if we account for application of professional knowledge and experience by the reviewer. Furthermore, Gioia, Corley and Hamilton (2012) argue that it is possible nonetheless to generalise, even from a single case. Research can certainly demonstrate generalisability should it 'generate concepts or principles with obvious relevance to some other domain' (Gioia, Corley and Hamilton, 2012: 24). Such applicability would be found within themes in terms of understanding, rather than any 'universal truths' that indie developers could take away and apply. Nevertheless, it is quite possible for such research to enhance and add to understanding of existing models and frameworks, especially as research questions take these into account vis-à-vis NVC and nascent entrepreneurship. In addition, theory building

can be perceived as evolutionary, iterating and developing upon previous work, via continuous improvement from a different context (Lincoln and Guba, 1985, Cope, 2011).

4.1.2. A lack of prior research leads to an inductive approach

As previously discussed, there is little literature exploring entrepreneurship in the videogames industry, less still that explores the indie journey to NVC. As such, the research area does not benefit from much prior knowledge of the phenomenon of entrepreneurship or NVC by indies; a scenario that lends itself to an inductive, rather than a deductive approach. As noted by Elo and Kyngäs (2008: 107), 'an inductive approach is appropriate when prior knowledge regarding the phenomenon under investigation is limited or fragmented.' Unlike a theory-testing deductive approach, this research adopts the inductive goal of developing an initial appreciation of the scenario before analysing participant narratives to begin the development of interpretation. This process leads to one interpretation of the participants' understanding of the phenomenon. Whereas the deductive methodology is inflexible, allowing little if any scope for alternative theories, the inductive approach begins with exploration rather than hypothesis, and therefore provides opportunities to reveal otherwise obfuscated experiences that can be later explored through discussion (Saunders, Lewis and Thornhill, 2015). In the inductive approach, themes may be drawn from the data, whereas the deductive approach starts with preconceived categories derived from prior relevant theory, research, or literature (Cavanagh, 1997, Kondracki, Wellman and Amundson, 2002).

4.1.3. Epistemological considerations

Whilst I present an argument for my methodological decisions, this is not to say my choices are the only approach or perhaps even the 'best'; there will always be a number of other options. However, although I briefly discuss some options below for the purposes of this research and the implications thereof, there will often be a valid argument for a different choice. As such, it is not the purpose of this section to put forth an argument against all philosophical and methodological perspectives not adopted, but to justify those that are present in terms of appropriateness and suitability to the research. Ultimately, philosophical position, theoretical perspective and choice of methodology are often thrown together and stereotyped into opposites. However, for this research, the position adopted is undertaken to guide the research. It would be nonsensical to rigidly adhere to all aspects

of any one philosophical position when it may contradict the research aims. To further clarify:

> *In the red corner is phenomenology; in the blue corner is positivism. Each of these positions has to some extent been elevated into a stereotype, often by the opposing side. Although it is now possible to draw up comprehensive lists of assumptions and methodological implications associated with each position, it is not possible to identify any one philosopher who ascribes to all aspects of one particular view. (Easterby-Smith, Thorpe and Lowe, 2001: 22)*

Nevertheless, the epistemological perspective is undoubtedly important (again, see Easterby-Smith, Thorpe and Lowe, 2001), as it (a) helps clarify research design and influences the overall structure of the research, including how data is gathered and interpreted and (b) provides insight into which designs are most appropriate or useful for the research objectives.

Theoretical Perspective

With its focus on complexity, richness, multiple interpretations and meaning-making, interpretivism is explicitly subjectivist (Saunders, Lewis and Thornhill, 2009). There are many possible influences on indie developers on their entrepreneurial journey. To reach an understanding of these, I adopt an interpretivist and somewhat social constructivist approach as I am not seeking a single truth, but an understanding of how all the activities and experiences are perceived. The objectivist approach aims to seek one truth through measuring and observing facts, ensuring value detachment from the research to avoid bias in the research findings (Crotty, 1998, Saunders, Lewis and Thornhill, 2009). This conflicts with my philosophical position and professional experience within the videogames industry. I aim to utilise my professional knowledge, experience and resultant values as a positive contributing factor to the research (see axiology below). Furthermore, I reject the objectivist doctrine that there is only 'one true social reality' and embrace the perspective that there are multiple equally valid and possibly contradictory beliefs that may be held by participants within the study (Crotty, 1998, Saunders, Lewis and Thornhill, 2009). All of these considerations are naturally of acute importance to this study as they impact the research philosophy, approach, design, and ultimately expectations around outcomes. As

such, it is crucial for these philosophical and epistemological considerations to be made explicit. Much of the above can be perceived via Table 3, below.

Table 3: A summary of positivist and interpretive / phenomenological paradigms
(Adapted from Easterby-Smith, Thorpe and Lowe, 1991)

	Positivist paradigm	**Interpretive / Phenomenological paradigm**
Basic beliefs	- The world is external and objective - The Observer is independent - Science is value-free	- The world is socially constructed and subjective - The observer is party to what is being observed - Science is driven by human interests
The researcher should	- Focus on facts - Locate causality between variables - Deductive approach	- Focus on meanings - Try to understand what is happening - Inductive approach
Methods include	- Operationalizing concepts so that they can be measured - Using large sample sizes from which to generalize to the population - Quantitative methods	- Using methods to establish different views of a phenomenon - Using small number of participants researched in depth - Qualitative methods

With a qualitative, inductive, approach to the research, it is perhaps not surprising that the perspective is interpretivist and not positivist in nature. The intention is to create new, detailed perspectives of social environments and contexts; similarities or homogeneity may actually be superficial (Conger, 1998). As has been explored above, different individuals may experience and understand phenomena in different ways, based (for example) on their individual and unique experience. Furthermore, Gartner (1985) notes that 'entrepreneurial firms are too diverse to permit simple generalization' and the position adopted is that this is also the case for those within the industry in question. By attempting to reduce complex and diverse perspectives to a generalisation, we lose the vivid and more potent understanding of smaller groups or individuals.

> *As different people of different cultural backgrounds, under different circumstances and at different times make different meanings, and so create and experience different social realities, interpretivists are critical*

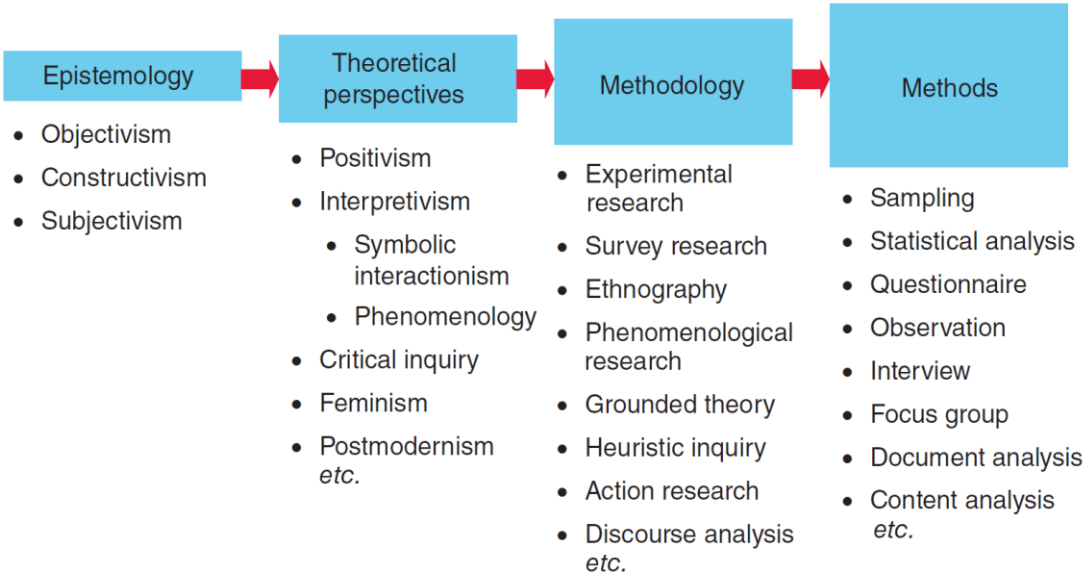
> *of the positivist attempts to discover definite, universal 'laws' that apply to everybody. Rather they believe that rich insights into humanity are lost if such complexity is reduced entirely to a series of law like generalisations. (Saunders, Lewis and Thornhill, 2009).*

However, it is not only the epistemological position that determines an interpretivist perspective for the study, but a heavy emphasis on its suitability for the research topic of research – businesses and the scenarios they explore are complex and often situated within unique contexts (Saunders, Lewis and Thornhill, 2009). Although an interpretivist theoretical perspective may seem an inevitability given the ontological and epistemological perspective, it is not the only possibility. There may well be an argument for choosing, for example, a postmodern research philosophy, insofar as there could certainly be a disproportionate level of power in the relationship between developer and other parties (consumer, backer, publisher, crowd-funder etc.). Nevertheless, a postmodernist study into the power relations that drive independent development is not the focus of this research, though it may well make for a highly valuable study.

4.2. Methodology

According to Crotty (1998), methodology is 'the strategy, plan of action, process or design' and is quite different to the methods, which are 'the techniques or procedures used to gather and analyse data' (Crotty, 1998: 3). The methodology, therefore acting at a more conceptual level, helps to provide a framework for how the research will be approached and planned, whilst the methods focus more specifically on the execution of research gathering. Nevertheless, whilst the methodology naturally influences the methods, it is not in itself free of influence. Texts discussing research methods (Crotty, 1998, Gray, 2013) suggest that via research design, a researcher may progress linearly from ontological and epistemological perspective, through theoretical perspective to methodology, and ultimately specific methods. Figure 3 below clearly and helpfully illustrates how this may develop and be perceived:

Figure 3: Relationship between epistemology, theoretical perspectives, methodology and methods
(Gray, 2013, adapted from Crotty, 1998)



Whilst this may be perceived as limiting in design or an oversimplification (perhaps for example, due to a state of flux many of these terms and concepts appear to hold in terms of whether they sit more within a theoretical perspective or methodology), it is nonetheless useful to this research to illustrate the links between each concept. Ultimately the question is posed, 'Which is the most appropriate and useful methodology?'

4.2.1. Justifying the methodological approach

The research provides examples of how indies make sense of the entrepreneurial journey – their experience of nascent entrepreneurship leading to NVC. This is perceived from an interpretivist perspective and as has already been discussed, using an inductive approach due to the research being exploratory in nature that cannot draw upon a wealth of pre-existing literature. As such, two specific methodological approaches are highly suitable for the research, grounded theory and phenomenology.

This study explores a research area that includes minimal academic literature and is generally underexplored by academic research. Whilst in one sense theories or concepts can be developed to help understand the field, in contrast there is a need in grounded theory to identify relevant data sources and codify a significant number of artefacts which

may initially be unable to be judged in terms of relevance. This would be a significant undertaking that may require extensive research that is ultimately not of use; grounded theory seeks to not only acquire the input of key individuals, but to include all data sources to strengthen the argument (Charmaz, 2006). One challenge would therefore be how to identify relevant sources when the locus of the experience is not yet known.

Also of issue is that grounded theory, by nature, emphasises theory development, which may or may not be achievable within the study, being as it is focused on the sense-making aspect of the entrepreneurial journey, and is also difficult to know at the outset of the research. Additionally, whilst grounded theory does attempt to understand the experiences of individuals in their own cultural context, phenomenology seeks to explore precisely the 'lived experience' in a way that arguably grounded theory does not and thus is better suited. IPA seeks to gain a robust description of the phenomena from the perspective of those experiencing the phenomenon – in this case indie developers themselves. In discussing the focus of phenomenological study, Gray (2013) notes:

> *The key is gaining the subjective experience of the subject, sometimes by trying to put oneself in the place of the subject. Hence, phenomenology becomes an exploration, via personal experience, of prevailing cultural understandings. (Gray, 2004: 21)*

Ultimately, the research moves through a state of exploratory study into a more interpretive domain in order to explore the lived experiences of individuals – the very core of the phenomenological approach. Considering the research questions alongside the philosophical position, a phenomenological approach seems both useful and appropriate. As an inductive and exploratory study, methodology is prone to adapt and evolve as it is shaped by the research itself – indeed this is natural in phenomenological research. It can be argued that methodology is somewhat of an iterative process that adapts and evolves with the thesis overall – perhaps even utilising aspects of several phenomenological approaches. Grbich (2012) identifies four major streams as classical/realistic/ transcendental, existential, hermeneutic and heuristic. However, in order to avoid becoming mired in a detailed evaluation of the potential marginal benefits of the most appropriate phenomenological approach (of which all may well be feasible), it became of pragmatic importance to determine which would be flexible enough to operationalise. Indeed, at the early stages of the study the objective was exactly this; to operationalise the

methodology in order to prepare for data gathering, rather than explore whether specific data analysis techniques were existential or hermeneutic (for example). As such, I moved in a direction towards interpretative phenomenological analysis (IPA) which, perhaps ironically, although not intended to operationalise any specific philosophical idea per se, does provide flexibility and guidelines for data gathering and analysis, whilst drawing widely (but selectively) from a range of philosophical ideas (Smith, Flowers and Larkin, 2009). IPA therefore is both a pragmatic and suitable choice for the study and is discussed further below. Finally, whilst there are similarities and differences between phenomenological streams in terms of suitability for this study, arguably all but classical do (to some degree) encompass the possibility of recognising one's own experience (Grbich, 2012) and how that may impact upon the research (positively or not), perhaps implying that such a decision was not as crucial to the study as choosing phenomenology as the methodological approach over any other.

Interpretative Phenomenological Analysis (IPA)

IPA is focused on the lived experience of the individual; the sense an individual makes of an experience (Smith and Eatough, 2012). Via purposive sampling, it focuses in isolation on the particular and specific case of the individual, and only once this case has been fully explored is a subsequent case examined. It is after analysis of the individual cases that potential similarities and differences between them are examined. This examination may lead to the development of emergent themes (Smith, Flowers and Larkin, 2009). Whilst findings are not intended to be generalisable, it is noted that an 'extension can be considered through theoretical generalisability, where the reader of the report is able to assess the evidence in relation to their existing professional and experiential knowledge.' (Smith, Flowers and Larkin, 2009: 4). Furthermore, 'the credibility and strength of IPA sample selection rests on theoretical (rather than empirical) generalisability' (Cope, 2011: 609). This study looks at the nascent entrepreneur and their experience of NVC. It asks the question, 'What is the experience of being an indie nascent entrepreneur starting a new venture in the videogames industry?' It examines this transition in the individual's life which is of significance to them. In asking this question, the participant engages in a process of thinking and reflecting upon their experience and feelings, to work out and 'make-sense' of what it means to them (Smith, Flowers and Larkin, 2009). The researcher captures and explores this through the 'double hermeneutic' (Smith and Osborn, 2003) of

the interpretative phenomenological analysis – the researcher making sense of the participant making sense of their experience.

Whilst IPA has often been utilised in the fields of psychology and nursing, it has also seen use in areas of social science, but in particular the use of phenomenology and IPA in a business context has emerged in the field of entrepreneurship (see Heinze, 2013). However, along with Cope (2005), Seymour (2006) identifies that phenomenological studies in the field of entrepreneurship are rare in comparison to the abundance of, and reliance upon, a single logical positivist theoretical perspective. Seymour (2006) believes that such reliance can lead to methods bias and theory testing rather than theory building, a position also adopted by others (Cope, 2005, Heinze, 2013, Berglund, 2015). Furthermore, he argues that such rarity should not exist given that entrepreneurship is 'by definition concerned with human behaviour' (2006: 151). This study therefore seeks to address such concerns.

IPA (along with other phenomenological approaches such as those of Giorgi (1997) and van Manen (1990)) are not without reproach. Paley (2016) is highly critical of 'phenomenology-as-qualitative research' (PQR) approaches. The argument proposed is that considering how much emphasis is put on deriving meaning from the narratives themselves, there is a distinct lack of clarity about how this is conducted:

> *Given that PQR researchers hardly ever describe meaning attribution in any detail – although the procedure is obviously pivotal – the answer to this question is by no means obvious. (Paley, 2016: 4).*

The major criticism concerns a perceived lack of clarity regarding the processes of determining 'meaning' when working with the text. This extends to the argument that meaning cannot be derived purely from the text itself without a priori knowledge of theory (indeed he argues that any phenomena chosen to be examined is in fact based on a generalisation of previous studies). However as a counter to these arguments, prior exploration of literature has been undertaken for this thesis – it is not pragmatic to ignore all literature in a field as wide as entrepreneurship. Nevertheless, whilst I adopt IPA, I also acknowledge the general thrust of Paley's consternation and so the process for meaning attribution – via interpretation – in this study is clearly established in section 4.6 below (*Analytic process*). As such. this study does not sit at the extreme end of a spectrum wholly defending every aspect of IPA, nor view it with extreme scepticism. IPA is a methodological

approach and as such has strengths and weaknesses, but the intention is to ensure its suitability for the research topic. It remains the case that several well received phenomenological studies have been conducted within the field that have demonstrated the value and importance of such a methodological approach through a laudable core of authors and texts (Cope and Watts, 2000, Cope, 2005, 2011, Seymour, 2006, Berglund, 2007, 2015, Kempster and Cope, 2010, Heinze, 2013). Indeed, Heinze (2013: 24) noted these scholars - Berglund (2007), Cope (2005) and Seymour (2006) - as urging 'researchers to use philosophical phenomenology and phenomenologically inspired methodologies in the study of entrepreneurship.'

4.2.2. Axiology and the influence of values

Clearly the topic of study is chosen based on a degree of enthusiasm and personal interest, yet it has also surfaced from my professional experience within the videogame industry. As a result, this has provided a set of values that drives the study. It could thus be argued that as a former employee of an independent videogame studio, my experience may influence the research. However, such experience allows the use of IPA to become highly appropriate, enabling the enhancement of interpretation beyond the participants' extracts through my own insights and experience, an argument supported by Harper and Thompson (2011).

However, even without my previous experience within the industry, it is reasonable and logical to recognise that research cannot be entirely value free – there are many areas in which personal values may intrude upon or affect academic inquiry, as noted by Bryman (2012), such as:

- choice of research area
- formulation of research question
- choice of method
- formulation of research design and data-collection techniques
- implementation of data collection
- analysis of data
- interpretation of data
- conclusions

However, the adopted interpretivist approach does not discredit the research as a result of previous knowledge and experience of the industry, it accepts and acknowledges that all research is value-bound. In addition, such a perspective recognises that axiologically, making efforts to separate all personal values from the research is not useful nor practical; adopting 'an empathic stance' and recognising one's own values and beliefs is in fact crucial to understand the world view and perspective of the research participants (Saunders, Lewis and Thornhill, 2009). It can further be argued that the adopted phenomenological approach concurs with these beliefs, certainly in forms such as hermeneutic, heuristic or existential phenomenology, as Grbich (2012: 98) notes in relation to the latter, 'as individuals we are inseparably part of the world. The fact and nature of our existence must affect our conceptualisations of any essences.' Nevertheless, that is not to say I do not recognise my own subjectivity in this regard. In attempting to make sense of how interviewees perceive their own experiences, it is acknowledged that this is viewed from my own interpretation of the participant's world, and once more we return to the double hermeneutic (Smith and Osborn, 2003).

4.2.3. Ethics

The research project was officially granted ethical approval by Edge Hill University Faculty of Arts and Sciences Research Ethics Committee on 14th December 2016. The research posed no apparent risk to participants or researchers. Following interview and subsequent transcription, documentation was only made available to the research team and records of the interviews were only used for academic purposes.

Participants were required to provide informed consent via an appropriate form. They were also advised that participation is voluntary and that they could withdraw at any time – they were given my contact details and those of my director of studies.

Beyond approval from Edge Hill University Faculty of Arts and Sciences Research Ethics Committee, there were no further special ethical considerations which were considered a requirement. Nevertheless, the professional code of practice of the British Sociological Association and the British Psychological Society provided guidelines and the Chartered Management Institute's ethics toolkit was well considered, in addition to the guiding principles and standards of good practice as laid out in the Edge Hill University Code of Practice for the Conduct of Research. All data captured for analysis was managed and

stored appropriately, in accordance with the Edge Hill University Information Security Policy, the UK Data Protection Act and using AES 128-bit encryption when necessary. Secure storage of data occurred using Edge Hill University data repositories to maintain security and retain backups.

4.3. Methods

Following on from philosophical and theoretical perspectives, along with methodology, it is appropriate to establish the research methods employed. As discussed above, the choice of methods is naturally influenced by the research methodology, which itself is influenced by theoretical and epistemological perspective. We can articulate a research method to simply be the various specific tools or ways data will be collected and analysed, for example: a questionnaire, interview, data analysis software etc.

4.3.1. Data collection

As Gray (2004: 213) notes, interviews are a 'powerful tool for eliciting rich data on people's views, attitudes and the meanings that underpin their lives and behaviours' and as such are highly useful to understand indie developer perceptions. They 'allow the researcher and the participant to engage in a dialogue in real time [and] give enough space and flexibility for original and unexpected issues to arise, which the researcher may investigate in more detail with further questions' (Pietkiewicz and Smith, 2014: 365). Furthermore, a number of specific criteria make interviews a useful tool for this research, as according to Gray (2004) and Rubin and Rubin (2005) they:

- Are considered appropriate for exploratory research examining/involving perceptions.
- Aid a phenomenological approach concerned with *meaning.*
- Require less perceived 'effort' on behalf of the participant.
- Allow for clarification of the meaning of words, phrases and so forth when there is complexity or ambiguity.

IPA has been chosen in order to acquire the lived experiences and perceptions of indies, and it is therefore appropriate to choose interviews as the method to gather data. More specifically, the interviews adopted a phenomenological approach as described below in detail by Thompson, Locander and Pollio (1989: 138):

> *The goal of a phenomenological interview is to attain a first-person description of some specified domain of experience. The course of the dialogue is largely set by the respondent. With the exception of an opening question, the interviewer has no a priori questions concerning the topic. The dialogue tends to be circular rather than linear; the descriptive questions employed by the interviewer flow from the course of the dialogue and not from a predetermined path. The interview is intended to yield a conversation, not a question and answer session. (Thompson, Locander and Pollio, 1989: 138)*

Whilst such an approach may be considered a 'pure' phenomenological interview, others recognise the nature of interviewing and, considering the challenges the novice researcher may face, a more pragmatic approach may lean further towards the adoption of a semi-structured approach (Hycner, 1985, Cope, 2005, Smith, Flowers and Larkin, 2009). Indeed, the semi-structured approach was to a certain degree prepared as a fall-back plan due to the recognition that the chosen approach may be challenging for the novice researcher (Starks and Brown Trinidad, 2007) and so areas of discussion related to the literature review were available should the 'conversation' abruptly end. It can be argued that the semi-structured interview is the typical approach for a phenomenological study, but this is not necessarily without reason and should not be shunned because of such. It is a highly appropriate method for exploring perception and meaning:

> *The semi-structured interview allows for probing of views and opinions where it is desirable for respondents to expand on their answers. This is vital when a phenomenological approach is being taken where the objective is to explore subjective meanings that respondents ascribe to concepts or events. Such probing may also allow for the diversion of the interview into new pathways which, while not originally considered as part of the interview, help towards meeting the research objectives. (Gray, 2004: 217)*

Each of the six participants was interviewed for a duration of between 60-90 minutes. Operationally, the interviews occurred over a period of three and a half years, between August 2016 – February 2020. They were conducted via Microsoft and Google online call and/or videoconferencing services (some were voice only and some were video), chiefly

due to the lack of geographical proximity between me and the participants. Initially it was felt that voice only was less intrusive – in part because this was often the first contact with the participant. However, it was also considered appropriate as individuals were usually working from home, being independent entrepreneurs operating without dedicated business offices – but also because video recording has traditionally been perceived as obtrusive and distracting (Rubin and Rubin, 2005). However, in later interviews, participants defaulted to video chat as it became more commonplace generally, and so this slowly became the norm. Interviews conducted online and from afar were perhaps also less discouraging for some candidates to participate generally, in terms of geography, travel and overall commitment expectations. This seems likely given several participants commented that they were in particularly busy periods of development and sought confirmation of the amount of time required for the interview. As such the interview as method was highly appropriate for the challenges of time-bound restrictions.

Interview audio was captured using the open source audio software Audacity. Files were exported to MP3 format in order to be later transcribed. All recorded interviews were stored and managed securely in accordance with Edge Hill University institutional Information Security Policy, the UK Data Protection Act and using AES 128-bit encryption when necessary. Following the first interview, the number of potential interviewees expanded (as each interview led to other potential participants through association and recommendation). This purposive approach of choosing subsequent respondents enabled the involvement of a homogenous group of participants, benefitting the research as a whole (Lincoln and Guba, 1985) and is explored further below.

4.4. Participants

This section introduces the participants, with a brief profile of each preceded by a discussion of access and selection criteria. Six participants were identified purposively and interviewed to provide their in-depth experiences of the phenomenon of nascent entrepreneurship – this is justified and explored in detail below, also taking into account recommendations from literature.

4.4.1. Access

Identifying appropriate sources, arranging interviews and other practicalities regarding fieldwork posed some problems in terms of access. Whilst many of my former colleagues were veterans within the videogames industry, few met the criteria sought (see below). Despite having contacts amongst videogame developers within the UK, most had not experienced the indie entrepreneurial journey. Access was therefore initially challenging – the participants sought were effectively business leaders with busy schedules and the desire to make games, not necessarily talk to researchers about their entrepreneurial journey. Nevertheless, in terms of actual participants, initial use was still made of existing contacts within the videogames industry via my former employer, which was for a significant time the largest independent videogame developer in the UK. These contacts were able to identify an initial individual for interview and following this first interview, snowballing led to others also participating.

4.4.2. Selection criteria

IPA sampling is typically purposive (Smith, Flowers and Larkin, 2009) and the participants were indeed selected based on a purposive strategy (Patton, 2002) of a relatively homogenous group. The participants selected were naturally chosen by the focus of the study insofar as they were relevant to the research topic of nascent entrepreneurship and NVC. However, there also needed to be a degree of pragmatism in participant selection as noted by Smith and Osborn (2003), due to potential issues of accessibility and enthusiasm to participate. Therefore, attempts were made to access participants from both initial research as well as my industry knowledge and experience, and both approaches resulted in success. Participants also provided enough homogeneity to be suitable for the research topic, insofar as they all had started their own business creating videogames as independent developers and met the minimal (though specific) criteria outlined earlier in the thesis. Participants also met the criteria as specified by Reynolds et al. (2005) of being in the 'persistence' stage of the venture creation process (see section 2.35 and below, p. 59). Therefore, they all had an experience (and the key intention of the research is to gain insight into how they make sense of that experience) of the process of development within those parameters - the *lived experience* of nascent entrepreneurship. Ultimately, the sample was chosen utilising the advice of Stake (1995):

> *The researcher examines various interests in the phenomenon, selecting a case of some typicality, but leaning towards those cases that seem to offer the opportunity to learn. My choice would be to take that case from which we feel we can learn the most . . . Potential for learning is a different and sometimes superior criterion to representativeness. (Stake, 1995: 243)*

Remembering from the methodological discussion earlier that the intention of the research is not to make predictions or validate hypothesis, both the selection and number of individuals were therefore chosen with the goal of providing rich insights into the topic, through their perspectives based on different lived experiences, but within a relatively homogenous grouping (Patton, 2002: 235). They had the potential to provide insights into the topic researched through their own personal, individual lived experience, and this is communicated through their narratives in the findings chapter.

The participants selected therefore can be described as homogenous thus:

- All met the criteria for having experienced nascent entrepreneurship as they had gone from non-business owner to business owner of >3.5 years ('persistence')
- All had worked to create videogames for PC independently of studio support or noteworthy publisher funding and released a game to market

4.4.3. Number of participants

Specifically in terms of determining the number of participants chosen to study, this was done based on the desire to gain 'information-rich cases' which could provide understandings and insights into the research topic (Patton, 2002, Smith, Flowers and Larkin, 2009). Nevertheless, the topic of 'sampling' highlights the significant difference between this qualitative study and that of quantitative methods and is worth clarifying further. Qualitative methods often focus on 'a small number of participants, even single cases' (Patton, 2002: 46), to *purposefully* choose information rich participants with the capacity to offer insights, i.e. selecting them *purposefully* to allow inquiry and understanding of a phenomenon in depth. Statistical probability sampling typically depends on larger samples selected randomly to enable confident generalisation. Thus the techniques employed are different, because both the logic and purpose of each strategy is different (Patton, 2002). Creswell and Creswell (2007: 118) go on to clarify equally, noting

that a purposive approach 'will intentionally sample a group of people that can best inform the researcher about the research problem under examination.'

In terms of interviewing participants, attempting to determine 'how many is enough?' at the research design stage can be challenging. The work of Guest, Bunce and Johnson (2006) notes that whilst many sources offer guidance on participant selection, few provide guidelines for how many participants should be included in nonprobabilistic studies. They also found there was no convincing method for how data saturation could be determined, nor the specific amount of participants needed to reach saturation of data, which is supported by Saunders (2012):

> *continuing to collect data until there is data saturation… is problematic as it is often necessary to have an idea of the number of participants likely to be involved in the research at the design stage. (Saunders, 2012: 44)*

Furthermore, in terms of determining data saturation, simply decreeing the number of participants required is also artificial when for example, 24 ten-minute interviews (24 participants) may generate no more useful data than 4 one-hour interviews (4 participants) yet would require the same 240 minutes of research time. It could be argued that 24 short interviews may actually generate *less* useful data, or that it may be more difficult to generate rich data in such a short interview time frame that is as insightful and unexpected as that which may come from 4 longer interviews. Perhaps a more useful, clear and unambiguous statement to which I adhere on this topic of participant numbers is by that of Patton (2002: 244), whom definitively states 'there are no rules for sample size in qualitative inquiry.' Similarly, Morse (1994) notes that 'there are no published guidelines or tests of adequacy for estimating the sample size.' However, Creswell and Creswell do offer some advice in this regard:

> *In narrative research, I have found many examples with one or two individuals… In phenomenology, I have seen the number of participants range from 1 (Dukes, 1984) up to 325 (Polkinghorne, 1989). Dukes (1984) recommends studying 3 to 10 subjects… No more than 4 or 5 in case studies…* ***The important point is to describe the meaning of the phenomenon for a small number of individuals who have experienced it*** *(emphasis added). (Creswell and Creswell, 2007: 126–131)*

Nevertheless, non-qualitative researchers often query the seemingly small number of participants in IPA studies, despite the richness of data that emerges from such (Wagstaff, Jeong, Nolan, Wilson, Tweedie et al, 2014). In addition to the above guidance, several further arguments are thus provided below to address this potential issue.

Firstly, Cope (2011) notes that previous studies in the field of entrepreneurial learning have already clearly illustrated that theory can be developed with single digit numbers of participants both through IPA and other phenomenological approaches, when the phenomenological focus remains close to the lived-world experience; as previously discussed, this thesis does focus on the lived-world experience. Secondly, returning to Patton (2002: 169), and as noted prior also by Creswell and Creswell (2007), we see that selecting participants purposively (which IPA does) is less about acquiring a large number of participants than it is about ensuring selection of cases that are information rich, 'from which one can learn a great deal about issues of central importance to the purpose of the research.' Thus he argues it is less about the number of participants, than the relevance of those chosen. Thirdly, he further outlines the reduced importance of the number of participants in another manner:

> *the validity of the qualitative data we collect and the understanding we gain will be more to do with our data collection skills (for example observation or interviewing) than with the size of our sample. (Patton, cited in Saunders, 2012: 44)*

Such frequent reference to Patton (2002) may seem dogmatic, but it is also the case that a great many sources defer to Patton (2002) on this subject (Gray, 2004, and Saunders, Lewis and Thornhill, 2015 for example).

Fourthly in response to any concerns regarding the number of participants, I was able to determine from the literature that six participants were indeed ideal for an IPA study and fell within the recommendations provided. Regarding the recommended number of participants to interview in qualitative research using nonprobabilistic purposive sampling, Dukes (1984) recommends three or more participants whilst Kuzel (1992) stated six or more and Creswell and Creswell (2007) - aligned with Polkinghorne (1989) - say that five should be the minimum in *phenomenological* research. However, Morse (1994) argued for six interviews in *phenomenological* research. Specifically for *IPA studies*, Smith, Flowers and Larkin (2009: 51) recommended 'between 3 and 6' noting that:

> *…many studies by experienced IPA researchers now have numbers in this range. This should provide sufficient cases for the development of meaningful points of similarity and difference between participants, but not so many that one is in danger of being overwhelmed by the amount of data generated. In effect, it is more problematic to try to meet IPA's commitments with a sample which is 'too large', than with one that is 'too small.' (Smith, Flowers and Larkin, 2009: 51)*

Fifthly, in their methodological review of the subject, Guest, Bunce and Johnson (2006: 78) looked across the range of research recommendations, including those mentioned above to state that 'enough data existed after six interviews' and that the 'the magic number of six' was consistent.

As such, I took into account the previously discussed issues of accessibility as well as adopting the specific recommendations for IPA studies (Smith, Flowers and Larkin, 2009, Smith and Eatough, 2012) and other phenomenological research (Hycner, 1985, Kuzel, 1992, Morse, 1994, Creswell, 1998, Symon and Cassell, 2012, Creswell and Creswell, 2018, Creswell and Poth, 2018) to concur that six participants would be appropriate and suitable. In the resulting data collection and analysis, it was indeed found to be the case that six participants were appropriate, as the fifth and sixth interviews revealed no further strong thematic elements, despite illustrating examples of those that had already emerged from previous participant narratives.

4.4.4. Narrative Profiles of Participants

What follows are narrative profiles of the individual participants, which helps to provide context for the later analysis. All participant names have been replaced with pseudonyms and their history anonymised as much as possible without losing the unique context of their background. Somewhat inevitably, anonymisation does on occasion reduce specificity, but insights are still provided into individual backgrounds and directions towards indie game development. The participants comprised both men and women as well as different ethnicities.

Zoe

Zoe began working in the videogames industry in the late 2000s, graduating from an arts, technology and programming background. Following her studies, she went on to start three

videogame studios over the next 5-10 years as well as becoming involved with financing game studios in the UK. Zoe also works as a consultant within the industry offering advice and strategic direction in a number of areas to other developers and organisations. Zoe founded her first studio and managed it for over five years whilst working on both videogame and non-videogame commercial projects. Subsequently, Zoe founded two new studios with new partners to further focus on independent game development. Those studios worked on existing intellectual property as well as free-to-play (F2P) games. Zoe also has direct experience of crowdfunding via Kickstarter, managing a successful campaign that enabled her to launch a game the following year. Zoe contributes to the UK games through numerous public-facing roles, working with arts and technology academies and speaking at major industry conferences. In addition, she has received numerous plaudits from the videogames industry and press, being a finalist for many awards in terms of business, innovation and leadership, including further nominations for awards from industry bodies.

James

James is a director of a UK videogames company founded in the early 2000s. The company was founded whilst he was at university in conjunction with friends, which are still significantly involved with the company. Whilst primarily focused on developing games for PC, the company has also launched their titles on other platforms such as consoles and more recently mobile. One of the most prominent titles has been extremely successful financially and generated valuable IP. Similar to many other UK indie developers, initial development began whilst James and colleagues studied at university, and they worked from their own homes to produce their first games. James is a keen believer in independent development and the company has worked without publishers and with autonomy on its own products throughout its existence. Early games were produced and distributed via traditional boxed product retail chains and thus James has experience of the shift to digital distribution. Early titles, although moderately successful, were not able to create a clearly sustainable business and thus the company has experienced challenges such as borderline bankruptcy. Nevertheless, subsequent titles have performed successfully, and have enabled continued development to the present. Indeed, the company has won numerous plaudits from very high-profile awards bodies for several titles.

Adam

Adam and his business partner were school friends with an interest in videogames. During university they worked together on their first game and over the following three years they became more serious about game development, founding their company in the mid-2000s. In founding the company Adam took on a greater responsibility, adopting roles that were necessary to operate as a business, in addition to game development. The first game was not considered a success in commercial terms, but it did lead to contracts for other non-related game work which provided further work for hire opportunities. Subsequently, the most successful title was released in the early 2010s, which received widespread acclaim and won several awards. It was funded via early access crowdfunding as well as concerted efforts and decisions to enhance community building during development. Sales data suggests the game sold over 1 million copies, generating a significant revenue alongside widespread critical acclaim within the industry, wining several indie and mainstream awards. The title was also later released on mobile platforms and a sequel was developed utilising much of what had been learned during development of the original game.

Luke

Luke's interest always lay beyond merely playing videogames; he was more interested in experimentation, which manifested early and developed during school, where he created games for class work. Subsequently, he undertook a degree in games design at university. He then began his career in the industry with a UK developer/publisher in a junior role. In his spare time he worked on a personal project that became his first indie game. Whilst his first title was not immediately successful, it did go on to generate significant commercial success later, selling over 1 million copies and also achieving tremendous critical acclaim both within and outside the industry. That success enabled him to leave his employer to start his own business in the early 2010s, where he has worked on his own projects since, creating numerus titles on both new and established IP.

Ray

Ray's interest in videogames began when gaining access to his father's work computer and figuring out how MS-DOS functioned. Following exposure to some of the basic games available, he subsequently started to look at the code behind the games and manipulated it to display different messages when playing them with others. As he grew up, his interest continued and he ultimately undertook a games design degree. During this time he worked

with student colleagues to develop a game that although not published, did progress through a number of key development stages with a publishing platform. However, during this time he was unable to complete the project due to others' influence on completing university work and projects, which ultimately led him to quit his course. Along with a former student colleague, he started creating games and became involved with others in a fledgling indie community prior to success with his first few games. This success was both critical and commercial, generating significant revenue and both indie and mainstream accolades from within and outside the industry. Since then, Ray has continued to work on game production as well as becoming a respected speaker and consultant within the industry.

Alex

At school, Alex enjoyed playing and creating videogames with colleagues who provided both encouragement and aspirations for him to develop his interest further. As he moved through his education however, this interest took somewhat of a reduced priority to his studies in the areas of sciences, although he still retained an interest in games. This interest led to him being involved with fledgling game development that was occurring on the Internet around that time, with amateurs creating games with small file sizes so that they could be shared and downloaded easily via modem. He also won an award for one of his titles around this time. After university and a stint with a technology company abroad, it was suggested to Alex that he further develop his artistic hobbies and apply for a role within the videogames industry to utilise those talents. Alex followed this advice and secured a position in a junior artist role prior to moving into design and then senior design roles for a development studio that worked on IP for others. Alex stayed in this role for some time and worked on several high-profile industry titles, one of which was cancelled after a lengthy development process. The cancellation of this title may have served as a catalyst for him to consider developing his own games as an indie, which he then went on to undertake. His first title achieved significant critical and commercial acclaim after its release on *Steam* and since then Alex has continued making videogames as an indie.

4.5. Moving beyond fieldwork

Previous discussion has covered research design and processes as a part of conducting the study. Such areas have, to lesser or greater degree, recognised the importance of preparing

for and undertaking fieldwork, as well as the need and value of reflecting upon the practice throughout. The nature of such fieldwork - or data gathering - was naturally entwined with the process of data analysis. Data gathering involved transcription which, as argued by Smith, Flowers and Larkin (2009), is in itself a form of interpretation and therefore a form of analysis. Lincoln and Guba (1985) note that a clear transition between data gathering and analysis cannot always be bounded, because the nature of much research and analysis is cyclical and iterative. It is worth noting therefore, that when undertaking this research, the commencement of data analysis did not indicate the end of data gathering – for a number of reasons.

Firstly, when fieldwork (in the most commonly used sense of the term) seems complete, that should not lead us to a conclusion that implies no more investigation could be of benefit. As the data is reviewed and analysed, patterns and themes emerge – that is one result of conducting analysis. Nevertheless caution must be taken, because as noted by Patton (2002), ambiguity and uncertainty may also present themselves with a significant dose of hindsight from far beyond the data gathering phase. This should perhaps be considered as a natural outcome of an inductive analytical process. Whilst some may point to data saturation as a method to counter such a scenario, this situation is not something that can necessarily be portended prior to analysis; indeed it may seem to be the case that nothing new is gleaned during the latter stages of data gathering, yet this is revealed to be incorrect later during analysis of the data. Furthermore, when discussing participant selection earlier, we have already challenged the notion of data saturation and the ambiguity of how and when it can be achieved, hence this possible predicament.

Whilst returning to data gathering may be appropriate in some scenarios – such as inductive iterative research - this should not be perceived as a necessity to eradicate any ambiguity or uncertainty that may exist in an imperfect world where certainty cannot always be provided. Indeed, perfectionism or striving to generate concrete rules where they may not exist brings in to question the level of authenticity that inductive qualitative analysis should provide (Patton, 2002). As such, the argument presented is that if a revelation occurs during research that further data may offer additional insights, one should not *automatically* rush to gather that additional data; to do so may impact authenticity.

The second reason why we should not necessarily consider fieldwork complete by the point of beginning data analysis is related to the nature of analysis itself and its chief conductor – the researcher. It is arguably at the stage of analysis that the greatest opportunities arise for the researcher to gain insights from heightened self-awareness. This can be perceived as a kind of 'meta-analysis' where 'qualitative analysis is a new stage of fieldwork in which analysts must observe their own processes even as they are doing the analysis' (Patton, 2002: 434). Therefore, the researcher's journey is far from over; yet to be concluded for example are tasks such as determining the criteria of data for analysis, how it is selected, how it should be analysed and how it might be communicated to the reader.

4.5.1. The purpose and challenge of analysis

Conducting inductive research and interviewing participants undoubtedly generates a great volume of data; but what is the *magnitude* of that data? What is the enormity of significance within the data gathered? Arguably, there is additional significance added via analysis and interpretation (Smith, Flowers and Larkin, 2009). In a state of rest, the data holds value and meaning for the participant; yet interpretation provides an opportunity to perceive additional insight (Cope, 2011). It is therefore analysis, often portrayed as a process of transformation (from data to knowledge), that brings forth further findings, purpose and value. Patton (2002) describes the challenge as the modern equivalent of alchemy, substituting raw data and knowledge for lead and gold. Nevertheless, it is precisely this challenge of identifying themes and interpreting participant narratives that the qualitative, phenomenological researcher must embrace.

Making sense of the massive amounts of transcribed narrative is not always easy nor obvious. Not only is it necessary to compile and order (whether thematically, chronologically or otherwise) such narratives, it is (perhaps more importantly) identifying the significance of each utterance that is most challenging in the early stages of interpretation and analysis, when perhaps patterns or themes have yet to emerge (Patton, 2002). Other challenges include generating a structure and method for conveying the salient aspects of the data. For example, whilst themes may become apparent, does analysis of individual cases or cross-case analysis provide the most apt way to bring the reader closest to the direct experience of the participants? Should findings be presented as case-within-theme or case-by-case? Returning once more to Patton (2002), he advises that 'there are no rules, only guidelines' and that as the study is unique, it should not be a

surprise that the analytical approach may be unique too, even if it differs but slightly from other studies.

4.5.2. Cases, patterns and themes

The narratives illustrate themes which help describe the findings. Nevertheless, themes are sometimes no substitute for revelations that can be brought to light by the descriptive narrative itself (Smith, Flowers and Larkin, 2009); the core of qualitative inquiry is what people say (Patton, 2002). Indeed, it is not the role of the researcher to summon and cajole tenuously linked comments into strict themes or patterns from the narratives at the expense of obfuscating the experience of the participant; it must be to reveal the nuance and detailed perspectives of the individuals' lived experience (Smith, Flowers and Larkin, 2009, Creswell and Creswell, 2018). In this manner, IPA provides a highly suitable approach in alignment with much qualitative enquiry, as it focuses on providing significant extracts of narrative from the participants themselves, which in turn is interpreted and analysed. The inductive analysis of IPA is concerned with discovering patterns and themes in the data. Initially identifying and defining key phrases such as those used by the participants themselves – in vivo – and subsequently by using themes that are apparent or emerge, but that participants do not necessarily use or recognise as such themselves. The analysis serves to identify the core consistencies and meaning through these emergent themes. Themes are not constructed by the researcher to shoehorn in experiential quotes, but emerge from the data and the interpretation of that data to facilitate the reader's understanding of the lived experience and phenomenon in question, as noted by Easterby-Smith, Thorpe and Jackson (2015), Gray (2013) and Patton (2002).

Analysis led to the emergence and generation of themes via abstraction, subsumption and similar processes outlined further below, resulting in themes as holistic banners for further discussion and analysis. Whilst this is the archetypal IPA process, it can also be seen as similar to a classic case study process, whereby each participant interview can be understood alone as a 'unique, holistic entity' (Patton, 2002: 450), but can also be considered as part of an integrated multiple case study, whereby an issue is evaluated across all cases (cross-case issue). Indeed, Gray (2004: 123) identifies a central advantage of case studies that is thus leveraged by IPA insofar as 'case studies can explore many themes and subjects, but from a much more focused range of people, organizations or contexts.'

4.6. Analytic process

Hycner (1985: 295) notes the need for but a limited number of participants to interview in phenomenological research thus:

> *Doing this kind of phenomenological research for the most part requires that only a limited number of people be interviewed given the vast amount of data that emerges from even one interview. The focus is of course on qualitative issues, not quantitative ones. (Hycner, 1985: 295)*

Nevertheless, in this thesis, analysis included over 62,000 words of transcript from six participant interviews, of which direct extracts are presented verbatim as examples in appendix 2. The result of these interviews was a combined transcript and analysis document of 124 pages., which as noted below, is a significant undertaking in an IPA study:

> *Because IPA is… concerned with understanding particular phenomena in particular contexts, IPA studies are conducted on small sample sizes. The detailed case-by-case analysis of individual transcripts takes a long time, and the aim of the study is to write in detail about the perceptions and understandings of these participants. (Smith, Flowers and Larkin, 2009: 50–51)*

As previously stated, the methodology employed to analyse said narratives is that of IPA. The key text on IPA (*Interpretative Phenomenological Analysis: Theory, Method and Research* by Smith, Flowers and Larkin, 2009) proposes a flexible approach to analytic development without a single prescribed 'method' in the traditional sense, i.e. no single definitive account of the analytic process is prescribed. However, the essence of the IPA analytical process lies in where the focus is placed for analysis - upon the participants' attempts to make sense of their experiences. The analytical process of IPA is further understood via shared values (commitment to understanding the participants' perspective and a focus on meaning-making in context) and specific course of action, that is to say 'moving from particular to the shared and from description to interpretation' (Smith, Flowers and Larkin, 2009: 79). The IPA process of undertaking data gathering and analysis as laid out by Smith, Flowers and Larkin (2009), can be seen below:

1. Interviews conducted and recorded.
2. Interviews listened to whilst being transcribed.

3. Transcripts checked for accuracy whilst listening to audio of interview. Initial notes and exploratory comments are added.
4. Reading and re-reading to become familiar with the transcripts, the flow, the descriptive core of comments close to the participant's explicit meaning and phenomenological focus.
5. Initial noting of descriptive, linguistic and conceptual elements.
6. Identifying and noting emergent themes, shifting from transcripts to notes.
7. Searching for connections across emerging themes; grouping conceptual similarities, via:
    a) Abstraction
    b) Subsumption
    c) Polarization
    d) Contextualization
    e) Numeration
    f) Function
8. Uncovering potential themes and patterns across cases.
9. A description and narrative account of each theme.
10. In discussion, relating themes and findings to any existing literature and theory.

Whilst the above is useful for understanding the process chronologically, it provides little detail on how analysis is conducted methodologically within each stage. Additionally, theme identification as a central aspect of the process is arguably not entirely transparent. It is argued by Smith, Flowers and Larkin (2009) that these themes emerge from the transcripts via analysis using methods such as abstraction, subsumption etc. and whilst this is indeed the case and those guidelines are accessible, there is still much to ponder in terms of operationalising the process. Whilst Smith, Flowers and Larkin (2009) note there is much flexibility within the approach and guidelines, as has been previously noted, others have levelled criticism that methodologically there is a lack of clarity over the specific data analysis process (Wagstaff et al., 2014, Paley, 2016) due to it not being prescriptive, although on balance it does not claim objectivity via a detailed step-by-step formulaic process (Brocki and Wearden, 2006). Nevertheless, as many qualitative studies are criticised for lack of details regarding their method of data analysis (see Bryman, 2004) and IPA providing flexible guidelines more than prescriptive methods, it is worthwhile providing additional detail on data analysis methods utilised in this study.

Operationally, as well as being cognisant of the overall IPA approach, guidelines etc., the process undertaken in this thesis utilises not only the framework of Smith, Flowers and Larkin (2009), but also that of Cope (2011) and Kempster and Cope (2010) in determining levels of interpretative phenomenological data analysis through which to progress (see Table 4, below). This approach itself is influenced by earlier IPA and phenomenological work generally such as that by Cope (2005) and Smith and Osborn (2003). These levels of analysis provide additional structure to the flexible guidance, but without becoming so prescriptive as to inhibit the analytical process for the context of this study. This results in a robust and detailed approach to analysis that leverages the flexible guidelines of IPA whilst simultaneously detailing clear and phenomenologically grounded analysis stages within the process. Examples or explicit reference to each process and level of analysis as described in Table 4 can be found below in section 4.6.1.

4.6.1. The process and levels of analysis

The *process* of analysis within the thesis moves through the stages in Table 4 below, with each stage also describing the *level* of analysis to be undertaken. This process of analysis is explored in more detail below - stage by stage - specifically in relation to the thesis, with examples provided (or later chapters referenced).

Familiarisation / gaining insight

At this first stage, recordings of participant narratives were watched/heard numerous times and transcripts were also read many times. Furthermore, it should be remembered that the interview itself provided an initial appreciation (indeed, in a sense the very first 'reading') of the participant narrative. As such, following conducting/recording the interview, the typical process of familiarisation would progress through the steps outlined below:

i) Listen to/watch the recording of the participant narrative whilst personally transcribing. Often this process required frequent 'rewinding' of interview sections to ensure basic clarity and accuracy of the initial transcription. This situation therefore necessitated listening to several sections many times, even at this very early step in familiarisation.

Table 4: IPA process and levels of analysis *(adapted from Cope, 2011)*

Process of analysis	Level of analysis	Description of analysis
Familiarisation/ gaining insight	Reading of the case	- Reading and re-reading of the transcribed interview to gain an appreciation of the whole story - Becoming 'intimate' with the account (Senior, Smith, Michie and Marteau, 2002). - Memos were captured as reflective notes on the issues identified (Patton, 1990).
Immersion and sense-making	Diagnosis of the case	- A 'free textual analysis' (Smith and Osborn, 2008) was performed - Potentially significant excerpts highlighted. - Consideration of Hycner's (1985) technique of identifying units of meaning - Units grouped to form clusters of meaning and colour coded
Categorisation	Developing intra-case themes	- Link reflective analysis (stage 1) with the clusters of meaning (stage 2) - Led to emergence of themes salient to a particular interview - Clustering led to 'master-theme list' (Smith, Jarman and Osborn, 1999) for each transcript.
Association/ pattern recognition	Developing inter-case themes	- Stages 1–3 completed for all; meta-level analysis conducted. - Master-theme lists compared similarities and differences explained - Creating 'links' between accounts (Easterby-Smith, Thorpe and Lowe, 2002) - Identifying shared aspects of experience, - Superordinate categories aggregated themes across accounts (Smith, Jarman and Osborn, 1999).
Interpretation/ representation	Writing up (Findings)	- Formal process of writing up a 'narrative account of the interplay between the interpretative activity of the researcher and the participant's account of her experience in her own words' (Smith, and Eatough, 2006: 338). - Emphasis on conveying shared experience, but process allows the unique nature of each participant's experience to re-emerge (Smith, Jarman and Osborn, 1999). - To maintain an inductive, phenomenological approach, interpretative propositions were written from the data without use of academic literature. - This allowed the data to 'speak for itself' (Cope, 2005).
Explanation and abstraction	Enfolding literature (Discussion)	- Analytical discussion enables process of 'enfolding literature' - Research phenomenologically grounded but also interpretative and hermeneutic (Seymour, 2006, Berglund, 2007). - Involved an iterative and comparative process of tacking back and forth between research questions and extant literature (Yanow, 2004), whilst remaining sensitive to the unique situated experiences of the participants.

ii) Listen to/watch the recording of the participant narrative whilst editing the transcript, checking and verifying the accuracy of the transcription. By this step, the entire participant narrative has already been heard at least three times.

iii) Listen to the recording whilst reading the transcript, with the focus moving from transcription checking to understanding the overall structure of the interview. A consideration was in mind at this step to identify aspects such as pacing, any building of trust and rapport and particularly dense, insightful and detailed sections. In addition, reflective notes and memos were typically captured when issues or curious sections were identified.

iv) Several (typically three or four) further readings occurred next without listening to the recording, with the focus on 'active engagement with the data' (Smith, Flowers and Larkin, 2009: 118). Capturing further memos at this step served to assist in the next stage (immersion and sense-making) as well as the later identification of the wider themes.

During this stage, the reflective notes and memos were captured directly alongside the transcript itself. Figure 4 below serves to illustrate one such example that was later encompassed within the notion of selfhood (defined in part as the individual participant's concern about how they may be perceived by others). This notion of selfhood later became a core component of Theme 3 ('I have this freedom' - Selfhood and Sociality). Figure 4 also illustrates how a two-column mode was utilised during this stage which enabled memos and notes to be captured directly alongside the relevant parts of the transcript.

Figure 4: Analysis stage 1: familiarisation example of memoing

Extract from transcription document	**Memo captured**
Part of it was I'd pitched a lot of [GENRE] games to publishers and they'd always said no, so there was a little bit of me being like "I want to prove this genre can work." In a very unique weird indie way, but just, I want to prove that this is a thing that will be successful.	Self-belief. Feasible. A *'well I'll show you'* attitude? To prove it was viable? To prove he was right/others wrong?

Immersion and sense-making

This stage involved noting any elements of interest from the narratives (whether descriptive, linguistic or conceptual) and enabled a growing familiarity with how the participant discusses and understands a concept, issue or experience. As noted by Smith, Flowers and Larkin (2009: 120) stages one and two can overlap or merge as notes and memos are often captured in stage one and continue/develop in this stage.

This stage is close to being a free textual analysis (Smith and Osborn, 2008, Smith, Flowers and Larkin, 2009) as it is without rules about what should or should not be commented upon. However, Smith, Flowers and Larkin (2009: 120) also note that there is no requirement to 'divide the text into meaning units.' Nevertheless there is value in at least the consideration of meaning units (Hycner, 1985, Cope, 2011) for the purpose of clustering meanings in a manner similar to what Smith, Flowers and Larkin term 'a descriptive core of comments' (2009: 120). Figure 5 below illustrates the process of identifying core comments and meanings during this stage in an extract from Luke's transcript. The narrative and clusters of meaning can be seen regarding several issues. Of note is the identification and clustering of related description with related meaning, notably autonomy (highlighted in green).

Figure 5: Analysis stage 2: immersion and sense-making

Participant narrative	Analytic notes
I've got really used to not having anyone saying no to me. In terms of big decisions. I hire people specifically who can challenge me. My games have lots of decisions in them that I don't agree with because my team talked me around, or I let them just do the thing they wanted to do, but it is all very much this kind of benevolent dictatorship approach. Like, I don't.. I, I don't have to answer to external voices or higher ups who don't know what they're doing. Everyone who criticises and changes our game is an expert in their field. And is better than me at what they do 'cause that's why I hired them, you know? I don't have to put decisions into my games that I think are bad. So whenever I 've had to work with other parties, that's always the fear. And sometimes it works well sometimes people are really cooler and I've definitely, I've definitely been really lucky. I think so far every relationship I've had that's gotten - and there are things I can't talk about at this stage but the conversation will take on some new context down the road - there are I've been very lucky that people have basically... because I've got enough of a reputation already, people do not tend to force bad choice on me. I've been very lucky with that. But it's the fear and there definitely things I've turned down, when, when there's one thing in particular where there was an opportunity to creatively direct something big with a different company and I - the initial meeting to discuss it was 3 people in the room. And then the follow up conversation we as going to be 6 people in the room and it was just getting bigger and bigger and bigger and I was like 'this isn't, this isn't how I'm used to working and I'm just goanna be angry for years making this, so I don't want to do it. So I definitely have turned down those kind of opportunities because of that. But the stuff that I am doing is working really well, because I do, I do, I do carefully vet when I work with a bigger company. Whether I think that's going to be a good relationship. And it's, I mean I am fully aware when this is transcribed this reads incredibly arrogant, it's not that it's just you know, I've had the luxury of creative freedom, for half a deca.. no, yeah, half a decade to a decade of time. It's really hard for me to have to put up with anyone who I don't think is smart. [laughs] And that makes me a bad person potentially but like... I don't suffer fools gladly in that context and I think it's great when it's my team, because my team is full of - like I say - experts - people who are better than me at what they do, that's why they are there, they can, I will have an argument with them and they will challenge me and I will challenge them and that's great but I don't have to answer to a board.	Control/power/ego/permission? AUTONOMY "let them" "Benevolent dictator" **"higher ups who don't know what they're doing"!** This sense of organisations with people who are incompetent. Non-experts making decisions. Can only criticise or make changes if you're an expert. **RELATIONSHIPS** self/other Freedom, independence (from publisher/superior's influence), ego, permission, autonomy? Making a change you don't agree with – forced to. Modesty? Serendipity? Status? "Force bad choice upon me" Is that therefore not a choice? Force choice = required to comply. Turned down offers because of a fear of putting things into games that thinks are bad. Seeking autonomy. Scale? Small being better, indie attributes "Going to be angry". Lots of people involved in project. At decision making level? Lots of people directing. Sense of losing AUTONOMY. 'Vets' bigger companies. Creative freedom – AUTONOMY/ego

Categorisation

Categorisation links earlier reflective analysis with identified clusters of meaning, to enable the emergence of themes for a specific participant. From initial memos, notes, textual analysis, clusters of meaning and the core of descriptive comments, intra-case themes can be identified. Whilst some themes may be stronger or weaker than others (and some may have more/less direct quotable examples) a 'master-theme list' (Smith, Jarman and Osborn, 1999) for the transcript can be generated.

Figure 6 below illustrates key aspects of one theme from Ray's master themes list after the first (familiarisation) and second (immersion and sense-making) stages of the analysis process were complete.

Figure 6: Analysis stage 3: development of intra-case themes

1) Evolution, growth, change (of industry, indie, individuals)

- Indie era / timing.
  - Tools became available (giving tools for creative freedom), reduced entry barriers.
  - Distribution platforms emerged (for Flash, Steam, iOS etc).
  - Community developed around early tools and distribution – sense of gratification.
  - Youth? (Lack of responsibilities and lots of time?)
- Indie - changing. Timing, eras. Indie went from small groups of people, countercultural in outlook, into greater numbers finding a level of success. Evolved into community, movement, just the *"notion that anyone can make a game."* (REALISATION). A cultural change, a movement.
- Industry - *"the industry has changed so much over the 10 years we were here. It's unrecognisable."*
- The evolution of their business / becoming an entrepreneur – Figuring out *"how to survive" "how to make money"* how to start a business and they become commercially aware. *"It's that moment where the creative has to make space for the commercial." "I think all indies have to be entrepreneurial – there's no way to survive without money."*

Association/pattern recognition

Once stages 1-3 had been conducted for all participant narratives, meta-level analysis was conducted whereby the master theme lists of all were compared and similarities and

differences explored. Shared aspects of experience were identified, and links recognised which led to the composition of the final three themes, operating at a superordinate level. This process utilised recommendations from Smith, Flowers and Larkin (2009) in how to look for connections between participant themes to identify inter-case themes. A list of all themes was placed on a monitor and each moved around, forming clusters of related themes, whereby some themes acted 'as magnets, pulling others towards them' (Smith, Flowers and Larkin, 2009: 134). Further iterative exercises were undertaken in more visual forms (see Figure 7 below for one example), utilising abstraction and subsumption, with efforts made to link themes at superordinate level, resulting in further grouping of related inter-case themes. Figure 7 also serves as a graphic representation of the structure of emergent themes as further recommended by Smith, Flowers and Larkin (2009: 139).

Figure 7 also provides an example of how association and pattern recognition helped to move from intra- to inter-case themes in the process of identifying the final superordinate themes. Attempts were made to conceptually group emergent themes at both the intra- and inter-case levels. One example within Figure 7 is how the constructs and themes of timing, evolution, growth, realisation, industry change and era (all circled in yellow) link together conceptually and are thus grouped as such to ultimately form the basis for Theme 1: 'The Golden Age' – Temporality.

Figure 7: Example of association: developing inter-case themes

Interpretation / representation

This stage is the formal process of writing a 'narrative account of the interplay between the interpretative activity of the researcher and the participant's account of her experience in her own words' (Smith, and Eatough, 2006: 338). Naturally, such an undertaking is in depth and a substantial component of the thesis as a whole - chapter 5 is in the main devoted to this stage. The emphasis therein is upon conveying the shared experience of the participants whilst simultaneously allowing the unique nature of their experience to re-emerge (Smith, Jarman and Osborn, 1999) through their own narrative. The voice of the participants therefore remains in focus, allowing the data to 'speak for itself' (Cope, 2005).

Explanation and abstraction

Enfolding literature into the analysis occurs in the discussion chapter later in the thesis. This involves an iterative and comparative process of tacking back and forth between research questions and extant literature (Yanow, 2004), whilst remaining sensitive to the unique situated experiences of the participants. This level of analysis involves bringing forth existing theory and literature in relation to the findings and weaving both together to produce explanations at a higher level of abstraction.

It should be noted here that unlike Cope (2011), enfolding literature directly into the participant extracts is not undertaken in this study because, as he notes himself, it can marginalise the voice of the participants. It is possible in a thesis such as this (and as he further points out, preferable) to conduct this step separately in a dedicated discussion section, with which this study conforms. This approach also adheres to the earlier recommendations of Smith, Flowers and Larkin (2009), who as seen above, recommend a dedicated discussion section as being the most suitable location to relate themes to existing literature and theory.

4.6.2. Emergent themes and interpretation

Each theme is explored in turn in the following chapter. There was a significant congruence amongst the participants with regards to themes. Every participant's narrative provides an example extract relevant to and supporting the justification and emergence of each theme. These examples can be seen in context within each theme throughout the next chapter and are also presented in summary tables at the outset (in the case of the first theme) and conclusion of the chapter for the reader to evaluate at a glance (see Tables 6,7,8 and 9).

A significant volume of raw narrative extract is provided in the next chapter which, via detailed analytic commentary and interpretation, provides evidence to justify each theme. The presence of extracts is therefore crucial and also serves to make the evidentiary basis of theme emergence transparent, as noted by Smith, Flowers and Larkin (2009). This narrative process, known as case-within-theme, provides deep insights into what has been learned about the participants' experience, whilst simultaneously enabling analysis at a thematic level to create new knowledge (Smith, Flowers and Larkin, 2009). In subsequent findings and discussion chapters, the outcomes of thematic analysis can be perceived as developing understanding 'by combining separate themes that together explain related issues' (Rubin and Rubin, 2005: 57).

Many thematic elements were illustrated by the participant narratives; those with prominence are discussed in depth. Themes considered most prominent recurred throughout an interview whilst also appearing to have a significant impact on the lived experience of the participant. This 'significant impact' on the lived experience is determined via interpretation - often derived from context, evaluation of examples, professional knowledge and linguistic decisions made by the participant to stress importance. Indeed, the interpretative results of this study will be but one interpretation – no doubt other interpretations will go in other directions and end with different results. This might lead one to question replicability, however, as Giorgi notes regarding qualitative research, such a different interpretation is unlikely to be 'wholly' different:

> *Thus, the chief point to be remembered with this type of research is not so much whether another position with respect to the data could be adopted, (this point is granted beforehand), but whether a reader, adopting the same viewpoint as articulated by the researcher, can also see what the researcher saw,* ***whether or not he agrees with it****. This is the key criterion for qualitative research. (emphasis added) (Giorgi, 1975: 96)*

Furthermore, my analysis and interpretation reflect not only my professional experience, but also the theories and subject matter with which I am already aware; a situation not unusual in qualitative research (Bhide, 2003).

4.7. Summary

In this chapter several discussions have outlined the philosophical and methodological decisions which are important to this study. Following a brief return to the objectives of investigating the lived experience of the participants, the research philosophy was outlined along with the epistemological perspective, and it was noted that the study adopted an inductive and exploratory approach. With an interpretivist theoretical perspective and a need to explore the lived experience of the participants, IPA was illustrated to be suitable in terms of methodology. In terms of specific methods, the use of semi-structured interviews supporting the phenomenological interview approach was illustrated to be appropriate. In addition, there was discussion of ethics and axiology as well as further discussion of participant selection before the narrative profiles of the participants themselves. Prior to outlining the data analysis process, the chapter included a section on moving beyond fieldwork, including a discussion on the challenges of analysis and interpretation as well as the nature of IPA in terms of illustrating emergent themes from participant narratives. Furthermore, detailed steps and examples were provided of the analytical process, based on previously established processes. In the next chapter, a very brief overview of the themes is initially provided, then immediately followed by the specific thematic findings themselves.

5. FINDINGS, ANALYSIS AND INTERPRETATION

The previous chapter discusses the philosophical basis and methodological considerations of the study as well as detailing the processes for data gathering. This chapter moves on from these considerations to focus specifically on interpretation and analysis of the findings from the participant interviews. Themes identified are supported via narrative extracts from transcripts and are analysed through interpretative phenomenological analysis (IPA). This interpretation and analysis is intended to organise and help communicate the meaning the participants ascribe to their experience, hence the inclusion and importance of the participants' own words from transcripts. The primary research question remains central to the discussion throughout – the participants' lived experience of nascent entrepreneurship in NVC.

Three experiential themes are presented individually, though it is important to remain cognisant that they are often not discreet in boundary and elements may overlap. Indeed, the themes often share frontiers and it can be difficult to pinpoint precisely where one element ends and another begins. The theme titles are drawn directly from phrases used by the participants themselves within their narratives. Table 5 below provides a brief overview of the thematic findings.

Table 5: Thematic findings overview

	Theme	Element	Description
5.1	Temporality – 'The Golden Age'	5.11 The Golden Age – contrasting before/after	The importance of time in an era of dynamism, perceived by participants as an 'indie boom.' A confluence of technological, commercial and cultural developments.
5.2	The indie journey - 'A dream of independence'	5.2.1 The Perception Shift 5.2.2 The Amateur 5.2.3 Making games is hard 5.2.4 Emerging entrepreneur	The process undergone and the experiences of that process from early realisations of the possible (The Perception Shift), through dreams that became a reality. Amateurism, inexperience and an emergent indie entrepreneur.
5.3	Selfhood and sociality - 'I have this freedom'	5.3.1 Autonomy 5.3.2 Selfhood 5.3.3 Sociality	The perception of self and other. Inter and intra-personal relationships. Autonomy, individual perceptions and being 'unbound.' Exploring a strong internal locus of control and perceptions of - and participation with – others; especially publishers and the indie community.

5.1. Theme 1: Temporality - 'The Golden Age'

5.1	Temporality	5.11 The Golden Age – contrasting before/after	The importance of time in an era of dynamism, perceived by participants as an 'indie boom.' A confluence of technological, commercial and cultural developments.

This theme illustrates how as nascent entrepreneurs in the videogames industry, the time and place the participants found themselves had a significant bearing on the creation of their venture.

Whilst this theme manifested in all narratives with much overlap and agreement, some participants dwelt upon particular facets more than others – Table 6 below loosely reflects this in a simplistic manner. It should be stressed this representation does not stem from any quantitative analysis, nor does it convey the detail, nuance and analytic outcomes of the narratives. However, the utility of such representation lies within the concise, visual way it communicates the participant quotes provided, by elements within the theme. The detailed, nuanced exploration and analysis of the thematic findings is presented further below, which is critical to understanding the theme.

Table 6: Theme 1 elements of presented participant narratives

	Adam	Alex	James	Luke	Ray	Zoe
Technological			X		X	X
Commercial	X	X	X	X	X	X
Cultural	X				X	X

5.1.1. The temporality of The Golden Age – contrasting with 'before' and 'after'

The participants' narrative extracts illustrate the perception of an era that was favourable towards the emergent indie entrepreneur. As example, Luke contrasts the present with that era:

> *You can't just make a little game and hope for the best. You have to have a reputation to do that… a lot of indies who are credited with these kind of masterful geniuses of breaking out actually just got really lucky. There was a time when that was possible… you could get on the front page of Steam for two weeks just on merit… and because there weren't any games there, you could kind of honestly coast - a lot of us did.*

Luke's wistful yet candid narrative illustrates a humble sense of loss; a sense of a simpler, easier, more just and hopeful time for the emergent indie start-up that has since ended. Alex also reflects on this era and calls it *'The Golden Age.'* This construct of The Golden Age can be seen throughout the participants narratives at both an overarching level (as above) and also via specific recollections and observations. Such an example can be seen below, where James describes the challenges of production and distribution prior to digital distribution, in a boxed-product supply chain with bricks and mortar retail. He notes that operating in that environment was:

> *Hard, really, really hard… for the most part, it's a really dirty business… it was a revelation to learn most of the sales charts are paid for… you had to have something called compliance… there's a huge amount of work fighting what I consider to be dishonest and shark business practice…*

He experiences this negatively, as a hostile environment and goes on to illustrate the difficulties and challenges it posed:

> *…you had all these production headaches… they've all got to be shipped to retailers, retailers wouldn't necessarily pay you on time either, plus you'd never be really certain of how many units they'd sold, so the barriers to opening that sales channel were incredibly high… digital distribution just, just took it away, completely.*

For James, the environment is complex, unwelcoming, difficult to manage and opaque, acting in opposition to a smooth-running venture. The contrast with the later advent of digital distribution is evident and perceived positively insofar as it removed all the barriers 'completely.' James goes on to illustrate the benefits of digital distribution further in contrast to this period:

> *You can login at any time and see real-time stats… [in traditional retail] it takes me four months to know if that sale has occurred. On my phone, I have a counter that tracks in real-time what's happening on Steam sales… I'm getting real-time intelligence on how well the businesses is doing so I can plan things, versus a four-month delay. So the two things are just completely incomparable.*

James experiences a sense of empowerment and opportunity – a more transparent environment whereby digital distribution enhances his planning as opposed to hindering or obfuscating business performance. The difference being 'incomparable' illustrates the positivity he feels towards the value of digital distribution. The change from boxed product to digital distribution is highly significant for James and he believes it to also be so for his venture. His narrative begins to build the idea of a venture surrounded and influenced by a changed and improved environment.

Adam also discusses digital distribution, recalling a conversation in which he asked an industry colleague (Mark Healey, who was the first to launch a 3rd party title on *Steam*) how to get a game published on *Steam*:

> *I actually mailed Mark Healey and said, 'how did you get your game on Steam?' and he said, 'Oh Valve flew me out to Seattle' [laughter] 'because they liked it. I don't know if that'll happen to you' [more laughter]. - Adam*

Adam's narrative does not contrast eras in the manner James' did, but nevertheless is still temporally situated directly in The Golden Age through illustration of a situation that now seems unreal. Adam is making sense of this memory as being of a completely different time, one in which the online publisher *Valve* – now a commercial behemoth - courted an indie start-up in order to persuade them to publish their game on *Steam*. A sense of amazement is present. The laughter comes not only from a recognition of how vastly different that time was to the present, but also the excitement that would be generated if it were to happen presently. The extract signifies that the environment in which this scenario occurred could not have happened before (digital distribution), nor is it likely to happen now. Whilst as expected Adam was not flown to Seattle to meet with *Valve*, they did in fact approach him directly to ask if he would put his game on *Steam*. Again this is a scenario that is very much of the time and much less likely to happen today, certainly not to an indie start-up. In continuing discussion regarding Steam, Adam elaborates how it functioned during the time period in focus:

> *'the visibility you got on Steam - Steam was massively different then, structured very differently… every single Steam user saw the same front page …you were exposed to every single person for a significant amount of time, that meant that you didn't really need to do marketing… that definitely made it easier at that point.' - Adam*

Once again, a positivity towards the era can be seen, yet on this occasion there is also a more direct contrast with the present. Adam believes it was easier 'at that point' as games gained more exposure with potential customers, and as such marketing was mostly unnecessary. Zoe concurs, saying '*for a while there wasn't that much on there, so it was fairly easy to get noticed.'* Less effort was therefore required to promote a title which conversely equates to more effort being required in the present, and Alex believes this to be the case, stating '*you now have a two-hour window in which you need to actually grab people.'* Again this suggests a temporal difference, one in which it was easy before, but is less so now.

The narrative extracts from James and Adam begin to illustrate how they make sense of their experiences through the construct of 'a better time', a golden age. Their narratives describe a more difficult 'before' and 'after' the initial availability of digital distribution, resulting in a period in between where the era – in this case the *technological* era - was considered positive and preferable.

In discussing revenue for his first indie title, Alex noted *'it was self-published with essentially 100% of the revenue coming back to me'* but he also noted this scenario was no longer necessarily typical for indies. As such, the perception of his nascent entrepreneurial period is described as:

> *what people might think of as 'The Golden Age' of indie dev… a world where you could create something and own it fully yourself and reap the rewards of having a huge hit - Alex*

Whilst once again this extract serves as an example of contrasting the 'now' with the (much better) 'then', Alex's focus here is on the ownership of the product and the financial rewards of success, which differs in context from previous examples. Here Alex reinforces the notion of The Golden Age (and indeed, he introduces this term himself) and also adds a *commercial* element to that era, in addition to the benefits of the *technological* elements as espoused by James and Adam. However, it is not just ownership nor a retention of profits that is seen as important to that age, but also the manner in which those profits may be generated. Alex refers essentially to the sales revenue in a traditional sense, but James notes that the emergence and availability of a different method of revenue generation was transformational too, in stating that: *'there is no way that [we] could have developed anything for five years before that crowdfunding model came along.'* For James, crowdfunding was critical to the length of development for his game; that is not to say that

without it the game might not have been made, but that the development period would have been shorter, and it seems, much shorter, given the emphasis of *'no way.'* For James therefore, crowdfunding as both a *technological* and *commercial* development was another positive contributor to the environment he inhabited at that time. Furthermore, it influenced the direction of a significant product (and thus the venture) in a way that would not have been possible in an earlier or later period, as Ray notes *'yeah crowdfunding was great - for a while.'* Zoe sees this similarly, with crowdfunding as a tool for indies being something that is no longer feasible:

> *I think crowdfunding has changed a lot… I don't know whether it would work now… I think people have also got more cautious… there's just been a lot of failures of stuff that a couple of years ago would have succeeded… a start-up doing that with no track record? …I would question whether it would work… I would never ever consider suggesting to a start-up that their own little game go into crowdfunding - I just don't think it's feasible. The chance of success is so low. - Zoe*

Thus the experience of the participants is that in *commercial* terms, the developments that enhanced profit retention and methods of profit generation before, can no longer be assumed or even considered as viable options. There is therefore, further demarcation between the era of the participants' start-up experiences and those of the present, with the former more positive than the latter.

Another element of the perceived Golden Age in terms of *technological* developments revolved around the introduction of software toolsets that enhanced the development process or reduced the need to create one's own tools to build games. Creating the software or building the toolsets required considerable time and effort. Zoe notes how when one game failed, the influence of both the *commercial* and *technological* environment was evident:

> *the game that we made was quite casual and because we had to build the tech and then build the game, by the time we built it, the App Store was out and it so should have been a mobile game. But because we'd developed our own tech we couldn't do it… - Zoe*

For Zoe, this scenario is frustrating. Having to build software tools to create the game was frustrating because there were none available that they could use. It was frustrating

because the length of time spent building the tools meant by the time the product was released, the marketplace had changed. It was frustrating because their product was developed for a platform that upon the game's release, was no longer the most appropriate platform for their audience. Frustrating because the tools they had created wouldn't work with the new platform. There is a reinforcement here then of a difficult time without widespread availability and access to appropriate toolsets - the more challenging environment outside The Golden Age. Zoe goes on to note later that:

> *'there wasn't Unity and we couldn't afford Unreal, so we had to build our own tech… which 2 or 3 years later was totally irrelevant.'*

This once more illustrates Zoe's frustrating and challenging experience, in this case not only were tools unavailable, but the tools they had built became useless. Also on this topic, Ray comments on how difficult it was to enter the industry prior to the availability of toolsets. He discusses at length the barriers to entering game development for indies, but specifically notes:

> *it wasn't open to people who were creative that then had to learn to do something mathematical to be creative - Ray*

For Ray, there were barriers to entry without the tools. He sees those who wanted to be creative with games being unable to do so at that time. Such narrative extracts demonstrate a perception for the participants that the era without the *commercial* and *technological* developments that came to fruition in The Golden Age was more difficult and challenging than when the toolsets were available. However, in addition to these, Ray also cites *cultural* developments as a significant part of the emergence of The Golden Age.

In discussing the development of indie as a phenomenon, Ray reminisced about how the industry *'changed so much over the 10 years we were here - it's unrecognisable.'* The significant degree to which he feels the industry has changed is apparent and his use of 'we' is inclusive in terms of the other indies with whom he evidently feels he shares the community. Furthermore, the use of 'unrecognisable' also supports the argument of it being wholly different and, as seen below, not necessarily for the better (at least not for the indie start-up), reinforcing the theme of The Golden Age as distinct from before and after. In his continuing narrative on the indie community, although his experiences align with other participants insofar as he believes *'the two things that changed were the toolsets and the distribution platforms'* he also introduces the cultural influence of an 'indie

movement' as a notable contributing factor to his perception of the era. This begins through recognition that although others were developing some of the first majorly popular indie games:

> *all of those felt like not necessarily our story, these were like big polished games by people who've been in the industry or who have money - Ray*

The indies Ray focuses upon are those who never worked in the wider videogames industry prior to their entrepreneurial journey, whose inspiration was the indie 'Pixel's *Cave Story*[5] and who *'dreamed of independence'* (Ray). These were individuals with a common interest, an early indie environment within which the desire to make games was shared amongst a community that was willing to help each other, widen participation and increase accessibility to game development:

> *the basic idea was very simple 'how do we give people that aren't necessarily mathematically inclined… the creative freedom to make things that they want to make?'*

Once more we can see the inclusive language Ray uses, emphasising the sense of community and how the widening availability of such toolsets was for him significant:

> *…game development is difficult, but [was] no longer as opaque, no longer as hostile, and no longer as insular. You could sit in your room or your apartment or wherever you lived, download a toolset and get going. - Ray*

According to Ray, the greater accessibility of these toolsets enabled the curious to become involved. He cites an example thus:

> *… my co-founder started programming in Game Maker, he downloaded a tutorial file and there was a car racing game and he replaced the sound of a klaxon with the sound of a cow. And he thought that was so funny that he kept making videogames.*

For Ray, this serves as an ideal example of how the 'indie movement' and its growth stemmed from a grass roots emergence of individuals who were amateurs, students and

[5] *Cave Story* was created by Daisuke 'Pixel' Amaya and was considered by many to be the model indie game; self-published and developed as it was by a single, passionate gamer in their free time over five years as an homage to earlier videogames in a retro style. See Bycer (2018).

the like, all with a curiosity about videogames or an ambition to make them. The narrative continues to discuss how the community grew around specific websites, forums and development tools and how those toolsets were developed, shared and proliferated amongst the community. For Ray, the community was important because it provided:

> *the combination of a way to distribute the work - even non-commercial - and build a small community so people could get some gratification from their work… derive this sense of value from their work - Ray*

For some, the community, gratification and availability of the tools to create games was enough, for others there was also a commercial driver, but few, if any, had commercial experience.

> *money was kind of frowned upon… then accidentally people started making money… the first distinct indie culture was just the counterculture… most of them were young and they were all making games in this weird bubble … [they] were very much a 'games should be games again' movement - Ray*

James recalls this similarly in relation to being nominated for a critically acclaimed indie award as they began to achieve further commercial success in the mid to late 2000's:

> *even then people were saying that they didn't think we were going to win… because we weren't indie anymore, because we'd had a commercial release, you know? So back in those days the idea of making any money from a product was considered a non-indie thing to do.*

Yet similarly to the *technological* and *commercial* aspects of The Golden Age, that of the *cultural* element was also perceived by the participants as an era of the past, illustrated by Ray's narrative below.

> *…those early indies, most of them no longer... have the mythological status that a lot of them had for a few years, because now indie is so big that most people don't… have to know those people. They don't have to be aware of that history anymore. Now it's just this notion that anybody can make a videogame.*

The *cultural* importance and value of indie that helped enable The Golden Age is clear for Ray; the history and community within which he was embedded for so long looks as if it is

dissipating. For Ray, the exploits, achievements, attitude, camaraderie and community spirit of indie have been reduced to 'just' the notion that anyone can make a game, and for him this is a loss. For Ray then, The Golden Age was not merely the manifestation of a *technological* and *commercial* zenith for the nascent indie entrepreneur, but a *cultural* highpoint within which the notion of community was intrinsic. For Ray, The Golden Age was when a community gained access to and influence over an entire industry and where for many, as is illustrated in other themes, the amateur indie dream coalesced into the reality of an entrepreneurial journey.

5.1.2. Theme 1 concluding remarks

For the participants then, it is evident they perceive the environment into which they emerged and grew as entrepreneurs to be of specific importance. However, they do not necessarily believe it is now impossible to start-up as an indie, though there is recognition it is different and more difficult; new indie titles still launch nonetheless, and many with critical and commercial success. Nevertheless, we can determine from their narratives that they saw great opportunity and possibility during their own nascent entrepreneurship – that the era was positive and conducive to developing and launching a title as well as creating a new venture, but not that it is now impossible. Adam illustrates further below:

> *I think there's a lot of kind of very extreme views of indie game development... either you make something overnight yourself or… it's the indiepocalypse… no-one can make money anymore… that era of Steam where it was easy to get a lot of attention through to like the Greenlight era… that took 5 years… while there is a lot of this stuff swirling around, I think newer devs need to not pay too much attention to that and really just focus on what they're doing… There will always be opportunities commercially if you have something that's really, really strong. – Adam*

5.2. Theme 2: The indie journey - 'A dream of independence'

5.2	The indie journey	5.2.1 The Perception Shift 5.2.2 The Amateur 5.2.3 Making games is hard 5.2.4 Emerging entrepreneur	The process undergone and the experiences of that process from early realisations of the possible (The Perception Shift), through dreams that became a reality. Amateurism, inexperience and an emergent indie entrepreneur.

This theme emerges from participant narratives that indicate a strong interest and desire to make one's own videogames, as well as from a narrative tendency to move chronologically through their lived experiences of game production. Whilst their early years bear relevance and are discussed below, according to many participants, a significant moment in their indie journey was believing it could be done.

Similarly to the first theme, this theme has several elements discussed by participants – with varying depths of focus on each, depending on the individual. However in this theme, all elements were discussed (to a greater or lesser degree) by all participants. As such there is a high degree of congruence between thematic elements, participant narratives and selected quotes.

5.2.1. Realisation: The Perception Shift

As seen in other themes, the participants saw new possibilities in terms of venture creation through significant *technological*, *commercial* and *cultural* change within the industry. However, in addition Adam also recalls a change in attitude towards indie, noting it was 'this nascent thing where people were really starting to realise that indie games could be a big deal commercially and critically.' He cites an example of this being when:

> *a very simple indie game - it was a puzzle game - … got covered in magazines; got 80% or something in PC Gamer, it got a proper review. And that was sort of our benchmark at that time was like, 'Oh you can make this, this weird sort of game and it can get a real review in a magazine' so, we went from…'Oh indie games are this funny almost hobbyist domain of development' to this very rapid transition of them being perceived as real products… that was kind of the perception shift happening around that time.*

This *'perception shift'* was not only a realisation that one could make games as an indie, but also a shift in how others perceived indie games (through reference to videogames

journalism considering them alongside other mainstream games). However, perhaps more profound for Adam is the realisation that making indie games is not only possible, but *viable*. Zoe describes this realisation similarly through her perception of widening access to digital distribution; albeit in this case through Apple's App Store:

> *it used to be very locked down… you need a publisher …and then the App store came out and everyone went, 'Oh my god I can release my own game!' - Zoe*

There is a sense of excitement and astonishment communicated in Zoe's narrative, a sense of wonder and a feeling that this was a revelatory route to the viable creation of a new venture. In his own narrative, Luke recalls how he was advancing relatively well in roles within a larger videogame studio *'trying to do the proper career progression'* when he became aware of the release and subsequent commercial success of the indie game *World of Goo* (2D Boy, 2008). There was a realisation that occurred that perhaps his approach was not the only viable way to make videogames:

> *…it was seeing that you could make games without commission. That you could make a game and you didn't have to go for a big company and you didn't have to work your way up the system. You could just go 'I'm going to go and make a game on my computer now.'… that was alien to me.*

The extent to which Luke's new reality was in juxtaposition to his previous belief is explored further below:

> *I was taught, you know, in my degree and in the workplace 'you need to be the best at doing a very specific thing and that's your value in a 300-person production.' So someone coming along and going you can actually make a game with two people and you'll be fine and you can live off that.*

In both narrative extracts, for Luke there is an important recognition of the commercial. Whilst there is indeed a degree of realisation that one could simply make a videogame on one's own (as opposed to being part of a '300-person team'), there is a deeper realisation that this could be done in a commercially viable way, 'without commission' and that 'you can live off that.' For Luke, his initial experience was one of jealousy:

> *'these two guys who just went and made a game at the weekend and it gave them absolute freedom and financial access to making whatever they want, and I was just massively jealous and was like 'I can do that.'*

Luke wants to 'do that' - wants to be able to make whichever videogame he desires. He is unable to do this in his current role; the games he helps to create are likely not his creative vision, nor fully under his control. There is even a sense of questioning why he has not done 'that' already, when others have demonstrated it is possible. He undergoes the realisation that making a game independently was not only possible, but viable commercially and that would lead to 'financial access' to continue making the games he wanted to make. We can begin to see here motivation in Luke; the 'freedom' to make the games that are his creative vision and to indulge his passion to do so. Luke's motivation is not to generate wealth per se, but to generate wealth in order to be free from being one person in a '300-person team' with the constraints of making others' games. Luke sees wealth, the 'financial freedom' as an enabler to make *his* videogames.

5.2.2. The amateur, the dream, the reality

The realisation that it was indeed viable to make one's own videogame tapped into a deeper desire within the participants. The extract from Ray below reveals something beyond mere realisation at the viability of creating one's own game, more akin to the possibility of fulfilling a dream:

> *when I started in games around 2010, indie was sort of a dream of independence that nobody knew they could do, right? It was relatively new the idea that you could make games on your own*

Ray's use of the word dream here is interesting because it connotes a sense of unreality – the notion that it was a hope, a desire, a wish even. There is a sense Ray felt that perhaps one day it may become possible, but it was aspirational, not typical. The use of the word dream is positive and desirable; that it was unquestionably a good thing to be able to independently create a videogame; being an indie was perceived as desirable, yet perhaps unreachable. This desire should perhaps not be unexpected given the participants' background – as will be explored further below, videogames were something he had enjoyed since childhood. Therefore a desire to make one's own games in one's own creative vision later in life is not necessarily surprising.

The influence of games on the participants' childhood was evident in their narratives. Zoe recalls one of the first games she played and becoming 'totally obsessed,' Ray fondly remembers how he 'loved' playing a game against his younger sibling and Alex 'grew up with an 8-bit home computer… playing lots of games.' Participants enjoyed playing videogames in their youth; their enthusiasm and passion for videogames is evident from their narratives. Yet for many, this evolved into not just playing more games, but creating them too, even as youngsters. Ray describes how aged 'around 6 or 7' years old he found a way to replace the title of a videogame with his own name on screen:

> *then the next time I booted up the game it said my name and I was fascinated… I just kind of never stopped doing that… it was always somewhere in my life… messing around with the games I had instead of playing them.*

Luke describes his youth similarly, noting 'most of my childhood I really was making games rather than playing them.' Playing and 'tooling around' (Zoe) with videogames was a passion for many participants, an intrinsic part of their life that they enjoyed. Playing games motivated them to go further, for many to explore with a sense of curiosity and to develop their own or become interested enough to want to be a part of that journey. In discussing the development of his first indie title, Alex notes 'making this thing I was really passionate about' and such enthusiasm can also be witnessed in his earlier years:

> *At high school, I continued to kind of noodle around on computers and would sort of make very crude games… amongst me and my friends there was like one guy… who made some kind of strategy game that had very minimal graphics, but at that time – "It has graphics? That's impressive!" That was a huge hit in the school. In the tiers of success, he had made this game that everyone in the school was playing and loved. We kept trying to emulate that.*

There is a perception by Alex that his own efforts were 'crude' and that those of the others with graphics were superior. Nevertheless, whilst he was provided with motivation to create, and a standard to aim for, there is also the sense that because having graphics was impressive, there was an understanding that such a game must have been difficult to create. Yet regardless of difficulty, that was what he continued to do.

5.2.3. Making games is hard

As seen above, participants were often driven by a passion for games, whether playing, creating or experimenting. Despite this, all the participants thought it important and relevant enough to raise the issue of how hard they felt it is to make games. The narrative extract below from Ray illustrates how he feels about the challenge of indie game development:

> *Making games is a… troublingly hard thing to do. Making games independently is by all means impossible and ridiculous… try and get together a team or do it all yourself. No matter which, you're going to have to find the skills to do every aspect of game development including art, narrative, design, level design and then also marketing, production and release management. The plethora of skills you need to make a game are ridiculous.*

Adam also referred to the challenges of making a game, noting specifically that it's *'always extremely hard'* to get a game shipped, *'you never have enough people, you never have enough time.'* Luke concurs and contrasts the challenge for a lone indie to a 200-person studio:

> *'it's really hard to make a videogame and if you're only one or two people then you're probably not going to be successful at that. If you're an individual; you have to be excellent at everything. If you are two people you have to be excellent at 50%... if you're 200 people you need to be excellent at 0.5% of things.*

There is a general recognition amongst the participants that without this understanding of the difficulty of making videogames, many emergent indies struggle to achieve their goals. Luke goes further, claiming that:

> *'the reality is that a lot of indie games are just shit. And that's something as an industry we need to be smart about and go, 'okay, yes they are, why?' Probably because it's really hard to make a videogame and if you're only one or two people then you're probably not going to be successful at that.*

There is a sense from Luke that start-up indies perhaps just don't have the required skills, but for Alex, it is more a sense that they may have unrealistic expectations and be

overambitious. His narrative illustrates a belief that for an indie, certain genres are simply out of reach:

> *The test I always apply is, would a conventional publisher back this? Are you doing something that is spending more time on something or pushing something further in a direction than a conventional publisher would be comfortable with? If you are, then that seems like a good thing, because I think erm, you're never going to be able to create a package as complete as a Grand Theft Auto game, right? If you're doing something that the AAA games are doing, you're never going to be able to polish it as much as them. If you're doing a 3rd person shooter or an FPS, you're not going to be able to compete on that level.*

There is a nod towards the difficulty of making games, but also of choosing the right games to make as an indie. In discussing his own title, he notes that:

> *it was very much not a conventional videogame and was exploring areas that most videogames have not explored, so in that sense was riskier than perhaps you'd be allowed to get away with… working for a larger scale publisher.*

In this sense then, there is an advantage to being an indie. This links to previous extracts too, generating a sense of purity derived from the amateurism of many participants' experiences. The amateur is not perceived in a pejorative sense here, but in the sense that they are driven by the project, the desire to make the product, to make games, by their passion and belief, unconcerned by many typical restraints – the drivers appear to focus upon making the best game they can and simply doing what they enjoy. Decisions are not made to please investors or gain favour with superiors, but by intent, passion and a mind open to creativity, originality and innovation. The amateur indie is not simply naïve or disadvantaged, they are able to embrace the ideological essence of the amateur, not only of passion for a subject, but an enquiring mind with pure intent, free of commercial influences and free of 'the effect that publishers have on creativity within games.' (James).

Arguably however, such publisher influence is not necessarily 'good' or 'bad' but is in part focused on inserting, removing or modifying parts of a game to generate (or increase) revenue. Yet as we have seen in the previous theme, much of the early indie culture composed amateurs devoted to the game over revenue - even anti-profit. Whilst this anti-

profit mentality was not present in the participants' narratives, they were still keen to point out that money was not the chief driver for them, as Adam states:

> *You know, we never got into this to try and make a lot of money. We weren't sitting there going, 'Hey if we make an indie game then we can do X, Y and Z.' It was more like, 'We enjoy this kind of work, we enjoy the collaboration and we enjoy the end product.'*

With recognition of money not being a chief driver, the topic of publishers negatively influencing development was therefore (perhaps somewhat unsurprisingly) present in the narratives of several participants. James for example, perceives publishers negatively in explaining why he did not want to use one as a funding source for his title:

> *a publisher would have interfered with the process to the extent that the game would not be as great as it is, because they would have shaved off, you know large areas of risk.*

Similarly, further evidence is present in the following narrative extract from Alex reflecting upon his earlier experiences in the wider videogames industry:

> *that for me is the non-indie world, is a lot of decisions are driven by marketing and sales. When you're dealing with those budgets and the corporate publishers, obviously some of the creative process is, is err... you know diverted or perverted from what it might be*

If Alex is interpreted as self-correcting here, it is evident that in changing his assessment of publisher influence over the game from 'diverted' to 'perverted', it brings forth negative association; insofar as to pervert is to 'interfere with or distort (a correct order or process); to impede, thwart' (OED Online, n.d.). Thus, for several participants at least, publisher influence is perceived negatively, and they believe this also holds true for some other indies too. (Publisher involvement is also discussed further in the next theme in terms of autonomy.)

Zoe believes this disdain towards publishers and commercial considerations goes too far amongst many indies, who she sees as perceiving those that do engage with 'commercial life' (as Ray calls it) as somehow being less authentic:

> *'my feeling is a lot of people who identify as indies feel that people who focus on the commercial as well as the creative - or in their view, maybe more than the creative - are not indie and you know, are sell outs.' - Zoe*

This perhaps begins to illustrate a level of commercial tension between the perception of the 'authentic' indie and the commercially driven non-indie, who (as Alex notes above) is making decisions driven by sales and marketing. Zoe further articulates a sense of differentiation between such indies thus:

> *a lot of really small indies or bedroom coders are doing things that they want to do because they think it's a creative challenge, and either that's because it's something they're passionate about or it's because yeah because they're trying to do something new in the space. And from my point of view I think that's really, really good, but I don't think that can't be done in parallel with caring about the fact that it's an industry and you're there to make money.*

Zoe further illustrates her concerns in this area by noting that being considered an indie 'in some cases, it means people don't take you seriously as a commercial developer.' It is also the case that in moving towards indie development, the perception shift introduced earlier gave those with a dream of making their own games the belief they could do so at a *commercially viable* level, despite the difficulty of making videogames and the further challenges of doing so as an indie. There is then, for the participants in any case, a recognition of the commercial in their emergent entrepreneurial experience. To help illustrate this recognition of commercial considerations alongside game development, Ray's insight into those challenges is illuminating:

> *The amount of risk and time that goes into making a game is obscene. Like, even a simple game that would be interesting to most people nowadays would take at least half a year to a year to make, right? And sure you could jam for a week and then make something that makes people go 'Oh I want to play the full version of that.' You can't jam for a week and then expect people to pay for it, right? So you're up front risk is basically two years of work hours or more and then if you did everything right - you programmed it right, you designed it right, you did the art right, you did the sound right, you did the music right, you did the marketing right, you did the production right and you managed to*

> *release it on a platform where your game can get attention, then … basically for everything you did right you flip a coin… if more than 4 are heads you might, you might get some money.*

There is much here to ponder, but there is certainly a sense of frustration and a questioning of why anyone may even choose to develop a videogame as an indie. However, taking Ray's comments at face value, we can naturally see how he believes it is incredibly hard to create a videogame, with many challenges involved, time and skills required, luck necessary and all undertaken with a high degree of risk and uncertainty. However, all of this is all intertwined with a consideration of trying to 'get some money.' He recognises that you can 'jam for a week' to create something interesting, but that would not create a product with commercial value. Thus for Ray, his reality is that to make a commercially valuable product – something someone would pay for – requires personal commitment, substantial risk, a wide number of skills and a large degree of luck. Ray introduces the idea of 'commercial reality' here insofar as not only is becoming an indie is difficult; there is a vast chasm between dreaming of being an independent videogame developer and the challenges that are present to do this in a way that is commercially sustainable; that there is a need to live and therefore generate income to survive. Nevertheless, whilst this process is perceived as difficult, it is nonetheless an endeavour the participants sought to undertake – it is what they want to do - the focus is on how they can make the game, then figuring out how to do it.

As we have seen above from their narratives, the participants are people fascinated by and curious about games, driven to understand and create them. However, for them, the 'dream of independence' (Ray) was still obscured. Whilst the tools, community and environment may have been conducive, they still needed time to create their videogame and some financial method of surviving. As an indie, such commercial realities could not easily be escaped. Ray's narrative has already illustrated how he perceives indie games development to be extremely difficult and he goes yet further here:

> *game development is incredibly complex, it is incredibly unpredictable, it is both a highly creative and a highly technical craft, but the reality of it is also mixed with commercial reality. Which when you put creative and commercial together it becomes kind of impossible.*

With making games being so difficult and a challenge upon which their venture relies, it is not unrealistic to think that it could consume an indie's time, energy and focus; perhaps

even to the detriment of 'kind of impossible' commercial considerations. It is therefore crucial to further explore the participants narratives as they move through their journey from doing what they enjoy – making videogames – to exploring entrepreneurial routes to commercial results.

5.2.4. The emerging indie entrepreneur

Ray believes there is a point at which commercial concerns can no longer be ignored:

> *I think in every prominent indie's story there is the moment of 'oh shit, I have to figure out how to survive.'*

There are two issues here. The first is how to initially survive whilst developing the first or early game, the second is more concerned with ensuring it is not the last - how the game will generate revenue. From the participant narratives, they demonstrate how they grow more entrepreneurial, whether by design or by necessity. Ray sees this as a critical juncture in the amateur indie's journey:

> *I think indie's become entrepreneurs... They're people that start doing this thing just because it's either the only thing they're good at or the thing they feel most comfortable in… and then at some point they either have to shift into commercial life and become entrepreneurs or they don't; in which case they usually falter.*

For the participants, in terms of how they managed to survive and fund their title, it varied in terms of how they operated during development. Alex saved whilst working for a larger publisher in the industry before quitting and 'going indie' and Luke worked on his first solo game whilst keeping his day job at a videogame studio. However, for the others it was necessary to find a source of revenue to continue making their games. Ray managed to generate revenue from selling small Flash games, noting that 'it was the way you earned your first money, it was the way you got some money to do your big game, the game you really want to care about.' He goes on to say:

> *indies have to be entrepreneurial because there's no way to survive the time you need to make a game, or work with enough people to actually make a game in a reasonable timeframe without money.*

Other participants undertook work for hire (Adam, Zoe) and/or established crowdfunding campaigns (James, Zoe) in order to allow them to develop and release games; they found

ways to continue financially whilst the games were developed. Their passion to make games helped drive an entrepreneurial approach to find a way to survive whilst creating. Yet that passion sought more than mere survival, it also drove them to seek ways to sustain the creation of that venture. Ray perceives this as:

> *that moment where the creative has to make space for the commercial. It's a very interesting moment in every indie's career*

Yet for some participants there was also a sense that the product itself and the venture had been neglected in terms of how it might allow them in the longer term to, as Ray says, continue 'the dream that we were lucky to have.' Participants narratives then, often illustrate (perhaps unsurprisingly) a naïveté or lack of experience as entrepreneurs. Their reflections of their nascent entrepreneurial journey often include specific anecdotes of situations and decisions which, if they were making in the present, they would make differently. For example, Zoe describes her experience at the outset of NVC, when she was without knowledge of how to even enter the industry:

> *We wanted to make games, but we were trying to work out how to even… we didn't have a clue. So erm, so we basically spent time working out how to get into it… we were totally clueless so it took us a long time to really work out you know how to do business frankly… to be totally honest it took us probably at least 3 years to even find our feet, because like we didn't know anyone in the Industry. - Zoe*

Zoe is not alone amongst the participants in lacking knowledge of how the industry operates or how one should operate one's venture within the industry. In discussing the early stages of developing the commercial aspects of his first indie title, Luke notes that *'there was no plan… it wasn't really thought out.'* Whilst Luke did have industry experience working for a much larger studio, he did not have any experience of starting or managing his own business, being solely responsible for creating and launching his own indie games. He further illustrates this lack of experience thus:

> *I wasn't planning commercially at all - and I think a lot of indies do this - I was kind of play-acting at what I thought you were meant to do when I was making a game. So I was taking it to events, I was demoing it, I was doing interviews with websites I read, because those were the ones that I thought were important. There was no plan. - Luke*

The ‘play-acting’ in his narrative illustrates that this lack of planning stems not from a lack of concern, but a lack of understanding about how to operate his new venture. Without this, he therefore merely demonstrated the product, his game. Ray’s narrative aligns with Luke’s comments in terms of this lack of experience in commercial terms, believing most indies *‘just have no idea what the hell they're doing’* and emphasises this though his own experience:

> *We made a Flash game that made $30k. We could have made much more but I had no idea what I was doing, obviously. We were negotiating with Time Warner; they had more money than $30k for a Flash game.*

Whilst this reflection demonstrates a notable degree of humility, it nonetheless also illustrates a lack of business nous and acumen regarding negotiating with a multinational mass media conglomerate. Ray clearly recognises his inexperience, the greater experience of Time Warner and how the result of that negotiation could have been much improved for him had he been more experienced in negotiating such a situation. Similar criticism of this lack of wider business acumen could be levied at Adam in discussing how to price a game; although different factors were considered, it was essentially:

> *‘based on some other indie games, erm from people that we knew. There was one guy… had done very well with [his indie game] at $25.’ - Adam*

In retrospect, this was no doubt a sound decision in terms of pricing (ultimately the product was considered a critical and financial success) - such inexperience does not always translate to a poor decision. However, it suggests how this nevertheless might pose a difficult decision for other nascent entrepreneurs in a similar situation within the industry, without wider business experience or detailed knowledge of the market, or unable to accurately estimate the value of their product. There is a sense from Adam’s narrative, that they went with their pricing not on a whim, but nevertheless because people they knew had done the same and it *seemed* to work out okay.

Zoe also highlights her lack of experience as a nascent entrepreneur developing her venture when working with a publisher to help promote and launch their title:

> *We got a publisher - I won't name them but they totally screwed us. They didn't do anything - we trusted them as a naïve kind of start-up, we*

> *trusted this very experienced publisher that they would market it and that their forecasts that they did were good, that they would get us on other platforms and all this stuff and they just did basically nothing... we really should have done our due diligence more in hindsight, but at that point we were just, well we didn't know even where to look.*

Zoe lacked enough experience to ensure contractual obligations would be met or to ascertain whether the publisher would deliver on their promises; understandable given inexperience at establishing such agreements. In addition, there is also the recognition that they *'didn't know even where to look'* – highlighting further the difficulty in trying to establish a working and ultimately fruitful relationship with a publisher without experience.

From participant narratives then, there emerges a sense that whilst their experience was meagre, an entrepreneurial awareness began to develop. A discovery that more was required of them beyond making the videogame itself. A sense that there would be a need to create and operate a new venture too, demanding a much wider skillset than perhaps they had envisaged. In this area, James feels that 'courses on how you run a start-up are important' and notes that 'one of the big mistakes that I see actually in indie teams is not having any good diverse skillset within that team.' For James a sense of frustration emerges at seeing others focus primarily on developing the game to the detriment of the venture:

> *Usually, a team of indies are all doing development - all of them… what you need to find is the guy that has always wanted to be a marketing guy, you know? That's what you need and when you're only 2 or 3 of you, you need that additional person with that absolute love to be getting out there and marketing the shit out of your game… Who's doing your marketing? Who's doing your finance?... I just get blank stares back… go to the marketing school, find somebody. Go to the business school, find somebody… carve up the business, a third each or whatever… because without those core skills… you will fail.*

5.2.5. Theme 2 concluding remarks

The narratives above illustrate a development, transformation and journey that the participants have experienced. From enthusiastic child to creating videogames, they underwent a realisation that making their own games need not be merely a dream; they surmounted many challenges of indie game development. Once here, they were faced with

further challenges of turning their product into a venture and becoming an entrepreneur. Yet, in doing so, they perceive see value in their journey, and not least a sense of freedom.

5.3. Theme 3: Selfhood and sociality - 'I have this freedom'

5.3	Selfhood and sociality	5.3.1 Autonomy 5.3.2 Selfhood 5.3.3 Sociality	The perception of self and other. Inter and intra-personal relationships. Autonomy, individual perceptions and being 'unbound.' Exploring a strong internal locus of control and perceptions of - and participation with – others; especially publishers and the indie community.

This theme illustrates the importance of selfhood, sociality and relationship experiences in the participant narratives and embraces several different, yet closely related subthemes that emerge. All participants discussed experiences in this area – hence the creation of this theme – yet they sometimes manifested not in identical, but similar and related ways. For example, James' disdain for publishers was clear and evident, whilst other participants had less polarised perspectives, or focused on other individuals and groups. It is therefore accurate to note that whilst participants may focus on different content within an element such as sociality (e.g. discussion of indie community rather than publishers), perspectives were aligned rather than contradictory.

5.3.1. Autonomy – Mixed elements of the self and other

The most prominent and recurrent element of importance to the participants in relation to nascent entrepreneurship and NVC, was that of autonomy; depicted here as the perceived ability to act freely, with eradication or minimisation of others' influence. Participants discussed many of their experiences and motivations in the very early parts of their nascent entrepreneurial journey through feelings related to permission and frustration, power and freedom and couched in terminology of decision making, denial and control. Further exploring these experiences provides insights into what it was like for the participants as they moved into and began to inhabit the domain of the nascent entrepreneur.

Permission and frustration

For several participants, prior to the journey towards creation of their new venture there was a need for them to gain permission to make games, or permission to make decisions about developing games. Such antecedent scenarios were perceived negatively in a way that often led to frustration:

> *we were pitching interesting kind of story driven games that were a couple of million dollars and the publishers would look at them and be like, 'this is a cool idea, it's a cool pitch, we believe you can deliver it, but if this game does really well at best we're going to double our money. It isn't worth the effort to double our money on a three-million-dollar game.' This was the point where, for me this was very frustrating - Alex*

Pitching for funding or for contracts put Alex in a position of needing permission to make a game, which as can be seen, he finds frustrating. However, it is argued that this was frustrating not only because the answer was no, nor because publishers liked the idea from a creative perspective and believed it was viable yet would still not say yes, but because the publisher did not feel the effort was worthwhile for 'just' three million dollars. Effectively Alex is refused and, considering his example of why he was frustrated, it was not just from a position of lacking authority, but also the decision not aligning with his philosophical approach to making videogames. Such a creative/commercial tension has been explored earlier in terms of the amateur, commerciality, publisher influence and the authentic indie (see the previous theme) and this recurrence reinforces the importance and significance of this topic to the participants. Alex then moves on to contrast this situation with his feelings when becoming an indie:

> *the biggest difference for me was not having to ask permission. So my whole career prior to that, especially working for an independent developer[6], was needing to pitch things to a publisher, was needing to - or respond to a request for a pitch from a publisher - to have things signed off, pitches, budgets, things signed off - Alex*

Thus, the frustration of not getting permission from publishers/funders to make games (or to make them in his vision), is removed and alleviated through becoming an indie developer, which is thus perceived positively. As an indie, Alex gained a greater level of autonomy; it was no longer necessary to ask others if he could make a game. This change to working as an indie is so profound for Alex, that he still uses terminology around 'permission' when in fact he is no longer required to do so. In an interesting phrase used

[6] As discussed earlier in the literature review, there is a significant distinction between the 'independent developer' and the 'indie.' In this instance, Alex's reference is in the context of them being a 3rd party developer (See literature review section 2.24 for further details). Therefore they must pitch ideas to publishers in order to acquire the funds to develop a game, and in order to continue receiving funds remain beholden to that publisher.

later, he demonstrates a deep-rooted permission-based mindset in literally giving himself permission:

> *I was like, 'I'm going to give myself 12 months to make a thing' - Alex*

Whilst he goes on to discuss the financial constraints that enforced such a restriction, there is still a sense of self-limiting power. Whilst permission to make a game and develop it is one example, all manner of decisions require permission when not in control of one's own videogame development studio, including content. In discussing his own title, he notes how working without publisher involvement, the creation of a riskier, unconventional game was possible that may have otherwise been impossible:

> *it was like very much not a conventional videogame and was exploring areas that most videogames have not explored, so in that sense was riskier than perhaps you'd be allowed to get away with, I think. - Alex*

Again being 'allowed to get away with' demonstrates the permission the publisher may deny. Yet for Alex, there is a sense that the publisher does not necessarily know best, even with regards to commercial decisions, explaining thus:

> *when I see something like Obra Dinn[7] [(Pope, 2018)], where I'm like 'no-one else would have done that game in that way' if you'd said to a publisher I want to spend 5 months creating a system to allow the ships rigging to be procedural and accurate because this means something to me, they'd have said no. If you'd said 'we have this art style which might not even work in video - on YouTube videos - and they'd have said no. But you know, Lucas was like 'this is something that's cool to me and I'm going to keep pushing that', that is his advantage, like that is the thing he can do that a publisher wouldn't do.*

There is a frequent sense that frustration is present when the decision is for commercial, rather than creative reasons - the concept of risk has been introduced above for example. There is a sense that Alex believes that he (as developer) may know as well or better than the publisher regarding what might enable commercial success, yet he is not the decision-maker. That not only a sense of creative or artistic integrity is sacrificed, but a potential commercial advantage may also be lost. Alex builds upon previous notions of indie creative

[7] To provide context, *Return of the Obra Dinn* (Pope, 2018) is a critically and commercially successful videogame by indie developer Lucas Pope, released in 2018 after around five years development.

versus publisher commercial tensions by suggesting that the developer may be better placed to make the commercial decision too. This idea suggests that the indie developer belief and passion perhaps trumps publisher received wisdom; the notion being that there is significant value (both creative and commercial) in persisting with the developer's vision over that of the publisher, which may (for example) lead to longer and atypical development practices. Alex provides further evidence of his argument thus:

> *I see something like something ridiculous like Gorogoa[8] [(Roberts, 2017)] which err, you know is, is so complex and clever that the only way you could make that game is for Jason Roberts to spend 5 years… on his own, believing he can do it and making this thing happen, he's not having to spend time ... to communicate that or pitch it or try and explain why this would be a cool thing, he just kind of knows that if he can execute on this thing it's going to be interesting.*

Alex recognises, indeed stresses, that the developer themselves has profound and valuable knowledge with which to determine whether creative components of the product will be valuable, yet in a typical developer-publisher environment, the publisher may very well not agree, or may place other commercial decisions in priority. For Alex then, this cycle of permission seeking and denial thus builds a sense of frustration towards a resolution. A picture emerges of the frustration experienced by Alex and endured within a role in industry as a lead designer, frequently seeking permission; to make a game, to fund a game, to spend budgets, to include content and to take risks, and being denied permission to do so, often for reasons that whilst they might appear commercially - as opposed to creatively – driven, still oppose the potential commercial success of the product. Thus, a sound creative idea Alex seeks to explore may be denied, perhaps because less risk or greater financial opportunities lie elsewhere, or perhaps because the publisher did not agree there was any commercial advantage. The resolution therefore forming for Alex in the shift to become an indie – a nascent entrepreneur developing one's own product and one's own business that enables products to be developed and released with a different emphasis, with the focus on the creative as an equal or superior driver for development (and possibly commercial success alongside). Becoming indie thus enables Alex to immigrate to an environment in which he was able to act with great autonomy in these

[8] Gorogoa (Roberts, 2017) is a multi-platform, multiple award-winning game which was released after six years development by Jason Roberts, who quit his full-time job to develop the game as an indie (Gordon, 2019).

regards, without denial and frustration from those with a different philosophical approach to developing games.

Freedom, being unbound, creative control

The issues around permission and frustration above are contrasted with a sense of freedom and being unbound as an indie - away from the traditional developer-publisher relationship. Above, Alex discussed the value of indie self-belief in a non-traditional development process in contrast to publisher commercial interests. Here too, Adam illustrates his own similar perspective in discussing the wider parameters an indie has during the development process:

> *you didn't necessarily have to stick to a release window or didn't have to stick to a budget or stick to a timescale you know, you got games like Antichamber [(Demruth, 2017)] that took almost 10 years to make because the developer kept adding and changing and iterating. You could never have that in a traditional game development context.*

Thus, Adam also illustrates the freedom available to indies to develop as they see fit, rather than by any pre-ordained timescale, content or publisher limit. James also feels a sense of freedom via crowdfunding as the commercial vehicle for development, noting that enabled them to be 'completely free with the creative process… it enabled us to develop… for five years before we launched.' Alex goes further, suggesting that the reason he continues with his venture is purely to explore his own ideas:

> *the reason I have this company is to allow me as a creative to go and make these cool things - Alex*

This is a strong statement about why the business exists and the freedom (and autonomy) which it brings to have greater creative freedom than when one exists within a larger, more established company that works more traditionally. He continues this thinking in the extract below which describes his production process:

> *we did a lot of upfront research and story work and things on paper in a way that I think if it had been a bigger publisher - a Square Enix or someone - that process that you're bound to as a developer of milestones, milestone deliverables, I don't know if they'd have been comfortable with a schedule that said like for 6 months you will see very little [laughs]. It will be [Alex] in a room staring into space, occasionally*

writing notes and stuff, and reading lots of books and things. But that for me was like a very useful part of the process. - Alex

Here there is now the opportunity to gain further insight into what is valuable to Alex in terms of autonomy – not only the ability to create the game he wanted to, but the freedom and creative control over both content and process; to create the game *in his own way*, without the need to adhere to industry practices. The *[laughs]* implies understatement in his previous remark; when he says 'I don't know if' there is a strong sense that he does know, and that a publisher would not agree. This can be determined from its contradiction of his description prior and furthermore, such a task has no obvious tangible output for which a publisher would be paying. This freedom from typical industry practice has been achievable for Alex by striking out on his own - enhanced autonomy - as he notes in recalling his most enjoyable time during development of his first indie title:

to actually be sat and going - that I'm making this game the way I want to make it, that I have this freedom - that was extremely fun… I was working in my garden and it was sunny, making this thing I was really passionate about and was far enough away from the scary bit that I had to deliver. That was very enjoyable. - Alex

Elaborating, Alex illustrates the high value he places on being unshackled by industry processes - insofar as he was able to control the creative process:

having made those changes to like the process creatively, to actually be sat and knowing that I'm making this game the way I want to make it that I have this freedom - that was extremely fun. - Alex

This freedom to choose *how* to make a game, rather than having to adopt traditional processes or seek permission therefore is important to Alex

…So with [my first indie title]… not only was I trying to make a game that felt different, but making it - trying to make it - in a different way. - Alex

This control over the content *and* process are evidently important to Alex. He illustrates this further yet again in his description of development prior to his move to indie, where after having an embryonic idea of a project approved, it was necessary to create very quickly for commercial reasons:

> *[the] developer needs to suddenly ramp up the team. So you want to get the team of 50 people up and running as soon as possible so you can start billing and making money off this thing. So… immediately me and the other writer are now trying to create the story, at the same time people are building level grey boxes, designing game mechanics, character concepts, building characters… erm, which is not the ideal way to construct something like that… kind of laying the track as you're kind of moving. - Alex*

Other participants discuss such a difference between indie and industry practice - the distinction between making games generally and making your own games. Ray feels that for some, control over this process is less important - that autonomy is not a precondition of being happy making games - but that for others it is important to have the freedom to direct the development personally:

> *some people end up feeling like a cog in the machine … and then miss the freedom to say what they want or to think what they want or to steer the project in ways they think is interesting. Some people want to make games their way, and some people want to make games. Those are different things… for a lot of independent developers, this sense of being able to plot their own course is connected to their sense of making videogames… - Ray*

As such Ray clearly distinguishes between those who choose to make games with their own venture from those who are content making games in industry with less autonomy. Indeed, in discussing a great number of indie developers who have not worked in industry, he sees these two pursuits not just mildly different, but fundamentally different:

> *For an overwhelming majority, AAA is about as alien an idea as working in banking software. They're two different industries almost to the point of the toolsets are somewhat similar, the goal is somewhat similar, but everything else about it is entirely different - Ray*

However, whilst many indies may never work in industry, the reality is that there are also those that did, such as Alex above and many others. Luke notes below how his own experience in industry and shift to indie began and was influenced by the actions of others within industry:

> *World of Goo [(2D Boy, 2008)] came out… it was a couple of EA guys who were bored and went to do something and I remember playing that as like a young guy trying to do the* ***proper career progression you know suck up to the boss, work your way up the system fairly kind of structure that I always assumed was the way you have a career and then here's these two guys who just went and made a game at the weekend and it gave them absolute freedom and financial access to making whatever they want and I was just massively jealous and was like 'I can do that'… I could do that, that's not impossible - Luke***

Whilst part of this extract was quoted previously, it is worth reiterating here more fully to explore further in the context of this theme. Notably, Luke references the 'absolute freedom and financial access to making whatever they want.' This freedom to work on content without other restraints is important to Luke and the belief that he could emulate such implies a desire to do so – to be free creatively and financially of his existing role as employee. This would seem congruent with the negative perception he demonstrates towards 'the proper career progression' whereby he would 'suck up to the boss' which is not his preference but is the means to an end. The freedom and creative controls Luke seeks are powerful motivators to him. Adam also echoes the importance of this autonomy and freedom in discussing what is important to the future of his venture:

> *'We, we want to work in the same way that we work now, we want to have the creative freedom that we have now, we want to be able to make product decisions in the way we do now.' - Adam*

Experiencing frustration as a result of being denied permission to make games - or make them in a certain way - is therefore a motivator to search for the autonomy which indie appears to offer. Alex describes one of his experiences working with a publisher thus:

> *[as lead designer] the last project I worked on there was for [a large, well-known publisher/developer]. It was a reboot of [a previously successful game], which we worked on for 3 years with a pretty big team and then the game was cancelled as they tried to figure out how to make money, [laughs] making videogames. - Alex*

It is difficult to imagine the degree of impact such a scenario may have on an individual. After working in a senior capacity on a creative project for three years, it was cancelled

because the publisher – a highly experienced, internationally renowned and respected business – could not 'figure out' how to generate a profit in the market at that time. It is likely this had a significant effect on Alex. The *[laughs]* might signify contempt in this regard, or astonishment; why did it take an experienced and well-established company so long to try and figure out how to generate a profit from a title they had endorsed? After spending three years on a project that ultimately came to little, how could he be sure this would not happen again, or how could this be avoided? There is likely to have been a significant degree of professional and personal investment. A lack of control over seeing a long-term project completed might therefore lead one to consider taking ownership of one's own destiny in this regard. As such, it seems reasonable to suggest that this scenario may well have contributed to Alex becoming an indie developer. The degree of power in the hands of the publisher to simply cancel three years of work is significant.

Such power differences were also evident in relation to autonomy for other participants. In discussing his experience on a university videogame design course, Ray notes that:

> *they just need their best students for that because their clients have high expectations. So, when I went "well no I'm actually using these students for a random independent game that I really want to make" they… shut that down hard and for me that was enough to drop out.*

Quitting university is not ordinarily a matter of little consequence for most, and in this case was a result of the university preventing Ray from producing his indie game with colleagues. Such a significant event illustrates the power of the institution and the significant impact on the individual. This power dynamic between publisher and developer, or employer and employee is significant and can be considered to influence decisions and motivations to become as independent as possible.

5.3.2. Selfhood.

Elements of the theme emerged that can be understood as intrapersonal – concerned with the self and perceptions of self. Several participants discussed their actions and decisions in relation to how they believed others would perceive them. Whilst this might seem both inter- and intra-personal, it focuses upon the individual participant's concern about how

they may be perceived by others, not how others actually perceive them and so is essentially intrapersonal. The first example in the narrative extract below illustrates two intrapersonal issues for Alex. Firstly, a strong internal locus of control is evident as is a self-awareness of it and an evaluation of how others may also perceive this too. Secondly, there is a fear of embarrassment and concern over the perceptions of others regarding his decisions and actions:

> *the big thing was I didn't want to embarrass myself, which was like actually the reason I didn't do a Kickstarter… because I was like.... in going indie that would already be like - amongst the developers that I knew and stuff it's a little bit of a bold move to go 'I think I can do this on my own now.' And the idea of doing a* Kickstarter *and if that* Kickstarter *didn't get funded - with that amount of humiliation, I was not down with risking that*

From Alex's narrative extract, we can see that he places a value on the opinions of his peers within the industry – it matters to him how others within the industry would perceive or judge him on his performance in terms of the success of his product, 'going indie was a bold move.' Also, we can see that he resisted conducting a crowdfunding campaign (Kickstarter) because if it failed, he felt he would be humiliated, again indicating how much he cared about the others in the community he knew. Overall, there is a strong sense that the personal, individual community within which Alex was ensconced was important.

Similarly, James illustrates the importance of others' perceptions. In this case, through a desire for positive recognition for his work:

> *…fiscal success is not high on my list. What I want to do is I want games that I put out to be critically well received and well received commercially… IGF [indie Games Fund] is a competition that we have a lot of respect for, so picking up nominations and awards at IGF is quite important to us… getting good reviews for innovative games is something which is important… - James*

For James, there is an acknowledgement that the judgement of those deemed knowledgeable (journalists and IGF judges) within the community are very important to him as he has 'a lot of respect' for them, as it would appear to some degree are the views of the consumers too, seeing as he'd like his games to be 'well received commercially'.

For other participants, there was a similar desire for critical acclaim in terms of wanting to 'prove' they could do it. There is a degree of mixed factor here insofar as it concerns both the self and sociality, however, it focuses primarily on the needs of the individual (gratification of their own desires/needs) to prove themselves to others. In discussing what his goals were when becoming an indie developer, Alex stated:

> *for me success was to you know put out this thing - prove I could deliver the game and deliver this experience that I thought was going to be really cool. - Alex*

Whilst initially it might seem Alex wants to prove this to himself, upon further enquiry he elaborates, demonstrating it is also to prove to others:

> *Part of it was I'd pitched a lot of [a certain genre of] games to publishers and they'd always said no, so there was a little bit of me being like "I want to prove this genre can work." In a very unique weird indie way, but just, I want to prove that this is a thing that will be successful. - Alex*

Alex is keen to prove to those who had previously denied him that his ideas were feasible, perhaps even commercially viable to some degree. Again, we can see here then a motivating factor and a level of justification for becoming an indie; not only a desire for autonomy, but the desire to provide evidence that his ideas were feasible and viable, regardless of what his former employers or publishers thought. They would not be able to deny his creative vision and he sought that success in part to prove them wrong, or to at least prove his ideas were viable.

Similarly to Alex, Luke describes below a meeting with his employer during the early period of developing his first solo indie game which was a motivating factor for him:

> *I went to the CFO… and said 'I really would like to keep exploring this idea, can I do it here, can I get a team and we'll make a little [game],.. and was laughed out of the room 'it's [redacted] Luke, no-one's going to buy it.' … So [my first indie game] was me trying to prove something - Luke*

Thus the low expectations and judgements of employers and publishers serve as a motivating call to action for Luke and Alex, providing inspiration to 'prove something', to prove it 'will be successful.' Returning to Alex below, we can see how this may factor into a desire to succeed through positive feedback. He feels appreciation of his work is critical:

> *For me especially, the critical response and to have kind of found, to find an audience was the key thing. - Alex*

Whilst this desire for critical acclaim by Alex (and James earlier above) can be interpreted as being concerned with how one is perceived (and thus being an element of their motivations and actions), further interpretation might also consider this as an ego factor seeking praise and critical acclaim (see below). However, typically amongst participants this instead tended to manifest as a strong internal locus of control - strong beliefs in their own ability and capabilities, evident simply via self-assuredness. An example of this confidence in one's own abilities can be seen below by Alex in relation to planning, where he reminisced about the early development of his first indie title:

> *"I'm going to give myself 12 months to make a thing and... erm, I'm not going to be flamboyant like in terms of like how much money I spend on this because I don't have a lot of money" - but I was pretty confident I could make something within that time frame. - Alex*

As an extremely experienced videogame designer from industry, it is arguably not outrageously overconfident to believe he could make some kind of videogame in a year, it would also not be outrageous to suggest many would feel this too risky, beyond them, or perhaps outside of their control, yet Alex believes *he* can do it. James and his business partner also demonstrate this strong internal locus of control in an example below. Through choosing to run their own revenue generating/sales system, rather than use an established platform such as *Kickstarter*. There is no consternation or concern apparent regarding potential risks or challenges such an endeavour might involve, alongside developing their game, they simply decided they would do it themselves:

> *'we, erm just set up our own website and just took the money, took the money ourselves and borrowed Kickstarter's kind of tiers…, just did it ourselves' - James*

The use of 'we just' – *twice*, gives us insight into their thinking – that they had confidence in their ability to do it. Similarly, a strong internal locus of control is also evident from Ray in believing that because he had achieved something once, he could do it again, regardless of how difficult or different it may be on a subsequent occasion, with a different product, at a different time:

> *I knew I could get a game into XBox Live Arcade because I'd done it before. - Ray*

Whilst typically having prior experience of a process is likely to be considered helpful, some may consider it more prudent to act with more trepidation, yet not so the participants on many occasions. However, whilst a strong internal locus of control demonstrates belief in one's abilities, there is also evidence to suggest this may sometimes transform into egotistical need - seeking accomplishment and wanting approval, as the following examples illustrate:

> *I was definitely very, very ego driven I'd say for the first, definitely for [my first indie game] - Luke*

> *success now is a lot more when somebody comes to me and says 'when I was in elementary school, I played [your indie game] and that inspired me to make videogames.' - Ray*

> *I enjoy that people associate me with work I'm proud of. I enjoy that people enjoy it. There's definitely an ego aspect to that. - Luke*

It is understandable and perhaps not unexpected that as videogame designers, developers, indie entrepreneurs and ultimately creative individuals who see their work as incredibly difficult (see above), they have sought recognition and gratification to satisfy their ego. That some recognise this as such is perhaps illustrative of greater experience and a level of self-awareness.

5.3.3. Sociality

Other elements that emerged within this theme can be understood through interpersonal relationships. Illustrated below is a contrast of conducive and unconducive relationships which the participants chose to discuss and that they felt had a bearing on their entrepreneurial journey as indies.

Publishers

There has already been significant discussion of publishers and narrative extracts from participants related to them in the earlier theme 'A dream of independence' (specifically within the section 5.2.2 . As such, there is little need to extrapolate in great deal here, although it is worth noting that the discussion earlier was in the context of the indie's journey as amateur to commercially aware entrepreneur; here it is the relationship itself

that is in focus. Nevertheless, a great deal has already been illustrated regarding the pejorative language used by participants towards publishers and there is therefore little need to repeat those extracts.

There is desire amongst the participants to have creative control over their ventures and videogames. This also manifests in a desire to not work with traditional publishers as an indie, or to at least avoid a need to do so. For example, Alex had experienced the frustration of being told by publishers how to develop games for which he was supposed to be the lead designer, or having a title cancelled after years of work. These led to him seeking autonomy in his own venture and game development, working without a publisher and maintaining control over the content and processes despite this meaning a much-reduced budget. Similarly, James chose to find an innovative funding method for his title, rather than go to a publisher for funding and in his narrative, discusses how he feels his game was better for this decision. James sees the publisher not as assisting, or even just being involved, but as 'interfering' with the process. Thus by eliminating dependence on the publisher, these challenges are eradicated. Overall then, a relationship with the publisher is avoided by the participants through choice.

Indie Counterculture

Participants often defined indie as a culture being in opposition to the mainstream/AAA videogame industry (for more detail on the countercultural discourse, see *Videogames and indie* in appendix 1). As such, their early decisions at a more pragmatic level sometimes appear determined by choosing a course of action in contrast to that of mainstream development. Such countercultural thinking is evident in the following extract from Alex:

> *in terms of coming up with that idea, for me the golden kind of check was, 'would a publisher back this?' and the answer clearly with [my first indie title] was clearly no. No publisher in their right mind would have gone for that pitch, but it was doing something that I thought was interesting. - Alex*

As we have seen above, Alex wanted to 'prove something' and felt that his specific genre ideas would work. As he illustrated earlier above (in his commercial journey to nascent entrepreneur) design and commercial decisions are likely to impact the scope and scale of games indies can make. Therefore Alex's decision was not only to be alternative to mainstream, there was also a sense that doing so would avoid direct commercial competition and therefore be a differentiator:

> *if you're doing something that they can't do, because it's too risky or it's too off the beaten path, then they can't compete with you… I'm focused in on the… personal interactions and the dialogue and the story, I can push that further and deeper than you would get away with. - Alex*

Such exploration of content that mainstream studios would feel controversial also adds to a sense of the indie counterculture and indie approach. This resonates in Ray's earlier discussion of the emergence of indie as a counterculture. In relation to the creative community website newgrounds.com, Ray talks about how indie as a culture aligns with Alex's thoughts above:

> *if you look at early Newgrounds 2008-2010 you actually can just see indie there. Like that's indie development. It was true, it was oftentimes a little offensive, it was counterculture it was punk, it was, you know, it was everything against the system that they could possibly be. - Ray*

Ray goes on to state:

> *a little bit of me still believes in that, that spirit of counterculture and I think it has always shown itself in indie games… I think the spirit of counterculture is still in there. - Ray*

This extract illustrates how he feels the countercultural indie attitude not only permeated games of the era, but became infused with all indie games and how it still influences to this day, signifying the importance to him of the indie community and it's early countercultural ethos.

Community

Amongst all the participants the indie community itself arose as a topic for discussion in relation to their experience and journey as an emerging indie game developer and new venture creator, although the perceived impact of the community varied. Ray for example, believed that community is exceptionally important:

> *Almost every indie has a story of emailing another indie who at that moment had the perfect advice. Sometimes in our case we end up working with those people later on, in other cases they just remain the person at the start of the story. But for most indies there is the moment where they make that intentional decision of reaching out to that*

community, receiving help and then being inspired by receiving that help, to help others. - Ray

There is a sense that those with more experience within the community are accessible, able to share their experience and importantly, willing to help. Zoe also discusses how individuals are willing to help others in the community by providing feedback, noting that:

within the indie space people give kudos to other people that do creative stuff - Zoe

Ray goes further in this regard, and introduced the idea that those that receive help are inspired to give help in the future. He illustrates this further with an example, discussing a situation when his game was illegally cloned:

a Canadian studio… who also had their game cloned, reached out to us and said 'hey we know this sucks, if you need help let us know - all we can do is you know mobile development' and we went well, can you port [our game] to mobile?' and they were like yeah, absolutely. So that's the reason we earned enough money to stay in business then. Because another studio gave back more than they took. Yeah without them we'd be gone. Yeah.

It is perhaps not unsurprising that instances such as this led Ray to become even more involved with the indie community and he illustrates this importance of community further:

[I began] working on making the community fairer and a more inclusive place… Yeah, it felt like I'd found a purpose, right? And I think that was a big thing.

Although Alex moved into indie after a long period working in the more mainstream industry, he too discusses the community in a positive manner, directly contrasting it to mainstream commercial game development:

coming from commercial game development you're very much in your silo, you're in your office, you're working on a game for several years that you can't really talk about, you're not really doing a lot of socialising with other developers because you're competing with them and it's a very different vibe, so that was, yeah it was only post-release of [my first indie title] that I really kind of got a sense of what the indie

community was really like and got to hang out and meet people. So that was super fun.

Returning to Ray, he once again articulates the importance of the indie community:

Being able to get the help from those people is inspiring because if they ever get to that point, now they can do the same… most of us got our start because we met someone who then helped us out, or met someone who inspired us - Ray

According to Ray, receiving help in the early days of start-up provides an individual with an impetus to do the same should they be able to do so in the future. Ray believes the community to be a positive and nurturing place for start-ups. He believes it to be a place whereby individuals encourage and continue to help those starting out in order to help the community as a whole. As such, there is a sense that it is not just the community that is important, but the personal nature of it, it's accessibility, friendliness and that the individuals matter too:

Scott Benson of 'Night in the Woods' [(Infinite Fall, 2017)] - I think it was him that summarised it, but it was basically "make games, pay rent, help others make games pay rent." - Ray

For many of the participants therefore, this sense of community plays a notable, significant and continuing role in their early entrepreneurial journey as emergent indie game developers.

5.3.4. Theme 3 concluding remarks

Within this theme, we have seen several different elements of importance to the participants manifest from their narratives and the interpretative phenomenological analysis. As nascent entrepreneurs, their experiences have been illustrated and interpreted through autonomy, and examples of perceptions of the self through proving oneself, as well as a strong internal locus of control. Furthermore, sociality has been explored through indie counterculture and relationships with publishers and the indie community. All these elements are bound up with inter- and intrapersonal matters in defining the entrepreneurial journey.

5.4. Further interpretation and analysis of findings

Throughout the previous section, a significant number of findings have been illustrated from the participants' narratives and as such it is useful to summarise and further explore them here. The primary research question set out to help better understand how nascent entrepreneurs make sense of their entrepreneurial journey. It asks the research to provide insight into 'what it is like to have the experience' (Starks and Brown Trinidad, 2007: 1376) of being a nascent entrepreneur in the indie videogames industry. That question is answered directly and holistically through the interpretative phenomenological analysis of participants' narrative experiences in this chapter above. They make sense of that experience by understanding it as part of what they believe was ***The Golden Age*** of indie, when they were able to fulfil their ***dream of independence*** and gain their ***freedom***. What can be seen below, is additional interpretation and concentrated distillation of the participants' own narratives to help further illustrate their experience via the themes; it teases out the key findings that will demonstrate the contribution.

5.4.1. Temporality: Theme 1 summary

The Golden Age as brought to light in this study encompasses a time of technological, commercial and cultural confluence for indies in the videogames industry. It does not have a pre-ordained, highly defined start and end point; its form and significance to the entrepreneurial journey emerges through the combination of the participants' narrative extracts and the interpretative phenomenological analysis of this study. Yet it is nevertheless possible to provide an informed estimate of the era's time period, given the context provided in the participant narratives.

Whilst individual videogame auteurs and a shareware culture existed in the 1980s and the Independent Games Festival began in 1998, participants such as Ray and James' earliest discussions regarding indie are temporally situated in the early to mid-2000s (but often note these were fringe, underground, counterculture and many were often non-profit). However, digital distribution is directly cited by participants as a key factor and arguably the most significant platform for commercial PC games that emerged in that era (*Steam*) did not embrace digital distribution until 2005. Participants talked of *World of Goo* (2D Boy, 2008) and 2008-2010 as being 'the time' (Ray, Luke) when technological changes became more visible and accessible. In addition, *Wired* magazine quit compiling 'Best indie Games' lists in 2008, citing as the reason that there were 'too many' (Thompson, 2008). In terms of an end date, this is more difficult to ascertain. However interviews for this study from 2016

onwards saw participants discuss this topic in terms of how it used to be easier and now 'everything is riskier' (Alex), crowdfunding is harder (Zoe), now you need to do marketing (Adam) and that the period 'may already be over' (Luke). As a guide then, though certainly not a rule, 2008-2015 would seem to be the focus of the participants' narratives, not for indie in its entirety, but for The Golden Age.

The participant narrative extracts illustrate that before The Golden Age, they experienced a hostile environment, shark business practice and production headaches (James). The environment was more complex to navigate, unwelcoming, difficult to manage, opaque and acting in opposition to long-term planning; 'really, really hard' (James). Barriers to entry were high (Ray) and accessible tools were unavailable (Zoe). Yet as technological, commercial and cultural developments within the industry ripened, The Golden Age fostered a sense of empowerment, possibility and excitement; 'it felt like that was the moment back in 2010' (Luke). There was a commercial transparency emerging that would enhance planning as opposed to obfuscating sales (James). Individual passion (Alex, Adam) and methods of revenue generation enabled longer product development cycles (James) and a greater retention of revenue was possible (Alex). Individuals fostered camaraderie, improved accessibility and reduced barriers through the growth of a community, of which they still feel a part of even today where they 'still believe in that spirit of counterculture' (Ray). Participants felt able to 'coast' (Luke) when reaching their audience was easy (Zoe) and marketing unnecessary (Adam).

Yet whilst participant reflective awareness of their earlier experiences recognises a sense of amazement at the possibility of the era (Adam), the positivity with which they discuss it reduces in line with the progression of time. The industry has changed so much it has become 'unrecognizable' (Ray), crowdfunding for start-up indies is inadvisable (Zoe) and now one has just a 'two-hour window' to get noticed (Alex). The community has been reduced to just a 'notion that anyone can make a game' (Ray) and the era of achieving a lot with a little has ended (Luke). There is a sense of loss and feeling humbled from experiencing a profound, just and more hopeful time than the present offers to the emergent indie start-up (Luke). For an emerging indie entrepreneur, prior to The Golden Age it was 'really, really hard' (James), and since 'it is harder' (Luke).

As videogame developers, entrepreneurs and indies, the participants situate their experiences within and outside of this Golden Age - an 'indie boom' (Alex). The narrative extracts of the participants illustrate how they conceptualise their early entrepreneurial

experiences within an era that was more conducive to creating a new venture as an indie. This recurrent theme then, The Golden Age, embodies temporality in a way which is seen as key to the development of indie start-ups and to their entrepreneurial and experiential development. It is thus an era which anchors their experiences temporally between a different and more difficult 'before' and 'after' in terms of indie game development and NVC. As new venture creators they are of this time (as is their emergent indie entrepreneurial experience), and it reflects the possibilities of the era. However, there is another, deeper feeling present amongst several of the participants stemming from the construct of The Golden Age.

For the participants, the conceptualisation of The Golden Age provides a sense of 'what it was like' to be an indie entrepreneur during that era - their experience. However, for some, there is a deeper sense that they feel somewhat fortuitous, that their decision to begin developing a game as an indie was somewhat serendipitous, coinciding as it did with liberating technological, commercial and cultural developments that would enhance their development. Narratives such as 'you could kind of honestly coast - a lot of us did' (Luke) or 'I think it's 100 times worse now' (Alex) provide an insight into their thinking. Such narratives suggest they may feel lucky to have decided their course of action when the wind just happened to be blowing in the right direction. That is not to say that they did not work hard, more that they feel their decision to 'go indie' (Alex) was very much a timely one. They are also embedded within a community (see theme 3) that is contemporaneously saturated with indies and games. As such, they have all those who have not created a new venture (yet are striving to do so) reflected back upon them. Furthermore, Zoe, James, Adam, Luke, Ray and Alex were not the only individuals to begin the creation of a videogame as an indie in The Golden Age, there were many others who did not succeed in creating a new venture. Thus the feeling of 'Why me?' may prevail amongst the participants; perhaps there may even be an element of imposter syndrome.

Whilst an undeniably strong influence on the participants, temporality is absent from Gartner's (1985) framework, which is curious. It therefore perhaps requires a reconceptualization of the *environment* dimension for the indie entrepreneur and NVC. The technological, commercial and cultural forces at work are all external to the *individual* and *organisation* dimensions. However, temporality is absent from not only Gartner's (1985) framework, but conspicuously from entrepreneurship literature on NVC generally. As such, this topic is therefore explored further in the next chapter.

A wide number of insights and findings are illustrated above in terms of the participants' nascent entrepreneurial experience, as they are throughout the IPA of this chapter. Nevertheless, to further summarise, the following can be considered key findings of this theme:

- **Temporality had a significant impact upon the nascent entrepreneurial experience of the participants in the form of 'The Golden Age' – a time of positivity for indie NVC in contrast to times before and since.**
- Community, camaraderie and counterculture were important.
- Participants felt empowered and excited by the possibilities of the era as well as humbled and somewhat melancholy at its passing.
- Participants felt a sense of humility at the temporal serendipity of their nascent entrepreneurial experience; one that coincided with or emerged from an age of profound possibility for them as indies.

5.4.2. The indie journey: Theme 2 summary

This theme emerges from both a general desire of many participants to make their own videogames (the dream), as well as from a narrative tendency to move chronologically through their lived experiences. Early in their lives they were often exposed to and enjoyed playing games, and several sought to understand how they worked, modifying them, and creating crude games of their own. Later many underwent a realisation that they could make their own games and figured out how to financially support that passion. In doing so they developed a level of commercial awareness that moved them towards an emerging entrepreneurial process as indie. This chronology can be perceived simply yet holistically as a journey, whereupon the participants move towards and through a stage of nascent entrepreneurship. Their experiences overall illustrate a process and a transformation, from realisation, through difficulty and commercial inexperience, further towards the entrepreneur. From the narratives, it is also apparent that for the participants this transformation is often conceptualised not merely as a journey, but as a dream; one which moves from fantasy to reality.

The narratives illustrate that for many participants, a passion for videogames developed from youth that fuels a desire to create videogames in one's own vision. Subsequently, a conducive environment (The Golden Age) provided a confluence of technological, commercial and cultural developments that, along with high-profile success stories such as *World of Goo* (2D Boy, 2008), prefaced a change in attitude towards small-scale

independent videogame development; a ‘perception shift’ (Adam). For participants this change resulted in realisation that it was not just possible, but commercially viable to create one’s own indie game, to simply say ‘‘*I'm going to go and make a game on my computer now.’’* (Luke). The participant experience also illustrates actions and behaviours infused with a lack of knowledge regarding how to create a new venture (Zoe), with a focus instead typically placed upon the product (Luke) until a second realisation occurs that understands the process is ‘mixed with commercial reality’ (Ray). This realisation (what Ray calls the ‘oh shit’ moment) is claimed to be a critical juncture that distinguishes the entrepreneur from the hobbyist or the amateur (according to Ray). He also sees this as a crucial area that separates those that do go on and create a new venture, from those who ‘usually falter’ (Ray). As such, the narratives illustrate the amateur wants to make a game, but the entrepreneur also acknowledges the commercial imperative for sustainability. Those amateurs may simply not be concerned with revenue and profit, perceiving themselves as a more ‘authentic’ indie. However, James argues many simply lack the necessary skills, and if they are solely focused on making the game, will therefore fail to create a new venture.

Within the ‘multidimensional phenomenon’ (Gartner, 1985) of NVC, clearly this theme is situated within the dimension of *process* in terms of Gartner’s framework (ibid). However, as a process, this theme does not neatly and equally sit with all six behaviours listed within the framework (opportunity, resource allocation, marketing, production, organisation building, response to society). There is much scope for further interpretation of whether the aspects of the *process* dimension accurately encompass the participant experience. As such, there is opportunity for further discussion in this area which indeed is present in the following chapter. There is also consideration from this theme of RQ5; *To what degree are the discreet stages and transitions in Reynolds et al. (2005) process model reflected in the lived experience of the participant nascent indie entrepreneurs?* It would appear that in some ways this process model is accurate and in others it is perhaps not, and therefore does not reflect the full nuance of the participants’ experiences. The chief area for further discussion resides in whether there is indeed a clear ‘conception’ of the venture for the emergent indie entrepreneurs; the distinction between developing the videogame (product) and the business is unclear in some narratives. Nevertheless, further discussion is once more conducted in the next chapter, exploring this area in more detail with regards to the potentially unique differences within the arena of indie videogames.

A wide number of insights and findings are illustrated above in terms of the participants' nascent entrepreneurial experience. To further summarise, the following can be considered key findings of this theme:

- **For many, a realisation occurred that becoming an indie was both possible and viable**
- Their entrepreneurial journey often illustrates inexperience and a lack of commercial planning
- Commerciality becomes a central question for many on the entrepreneurial journey to NVC

5.4.3. Selfhood and sociality: Theme 3 summary

In addition to autonomy, this theme is concerned with how the participants perceive themselves and others and how this influences their actions and behaviours. Alternatively, this theme can also be conceptualised in terms of how the participant experience is shaped by their relationships with self and other. Participants discussed many of their experiences and motivations in the very early parts of their nascent entrepreneurial journey through feelings related to permission and frustration, power and freedom and couched in terminology of decision making, denial and control. A key element of this theme then was autonomy, which held significance for all participants. Starting the journey of an indie entrepreneur generated feelings of being unbound and enabled participants to enjoy freedom from publishers and superiors who had previously held power over them. Whilst their prior experiences shaped their intrapersonal relationship, through their newfound autonomy they created different perspectives and approaches to processes, development and content. There was a marked contrast in their descriptions of being an indie, compared to their descriptions of or perceptions of industry and non-indie approaches, with indie being perceived almost universally in a positive manner. As such, many insights were evident in the participant narratives regarding their perceived reasons for early entrepreneurial decisions and motivation. For some, this stemmed from experiencing frustration in earlier roles, for others, a desire to maintain creative control and for yet others, seeing those who had already demonstrated the viability to 'go indie' inspired them to try for themselves.

The participants experienced frustration working with, or in their perceptions of, publishers. They did not want to operate in an environment where they were required to constantly pitch ideas for approval, where 'decisions are driven by marketing and sales'

(Alex), or where 'the creative process is perverted from what it might be' (Alex). They did not want publisher 'interference' (James) to the point where a game would end up 'not being as great as it could be' (James). They were frustrated that publishers thought it 'wasn't worth the effort' to generate $3m in profit (Alex) and at having resources taken away mid-project (Ray), or projects cancelled after they had expended years of time and effort (Alex). Alex also felt that his knowledge of what might be innovative and commercially successful could unjustifiably be ignored by publishers and both he and Adam gave examples of successful, highly ambitious personal creative projects that would not have been possible in a traditional developer-publisher environment. There was a belief that risks were minimised by publishers (James), regardless of potential gains or developer knowledge (Alex). This strong sense of the importance of freedom and independence is illustrated throughout by the participant narratives. For Alex, working in his garden in the sunshine creating a game utilising his own preferred development process 'was very enjoyable' as he was not beholden to publishers in terms of constant pressure to deliver, or as he puts it, having to keep 'laying the track as you're kind of moving.' There was a sense of wanting to retain 'creative freedom' (Adam) and Ray talked of how for indies 'being able to plot their own course is connected to their sense of making videogames.' Arguably, much of this could be said to be a fundamentally philosophical or ideological perspective on how to make games, and perhaps this as much as anything illustrates the position of the indie clearly. However, it does illustrate the autonomy indies seek; being able to make the games they want, in the way they want to make them.

Participants intra- and interpersonal concerns (and decisions about how they may be perceived or judged) were noticeably present in the narratives. There appeared to be a need to prove oneself (Alex), to both oneself and to others (Alex, Luke) and for Alex there was also a more general concern for how other developers and indies perceived him ('I didn't want to embarrass myself'). Furthermore, how their games were perceived was of great significance to the participants, in terms of innovation (James) and generally by consumers (Ray, Luke, James, Alex) and critics (Luke, James), even above 'fiscal success' (James), with Alex noting 'to find an audience was the key thing.' They also demonstrated a strong internal locus of control, always believing they could deliver on their vision, being 'confident' they could 'make something in a given timeframe' (Alex) or that they could get a game on a more exclusive platform merely because 'they'd done it before' (Ray). They even 'just did it themselves' by establishing innovative new funding methods rather than using established processes (James). However, such a strong internal locus of control also

appeared alongside egotistical desires, such as hoping others would be 'inspired to make videogames' by them (Ray) or by becoming known for their work, with Luke stating, 'I enjoy that people associate me with work I'm proud of… there's definitely an ego aspect to that.' There were also recurrent discussions regarding interpersonal elements, sociality. Relationships with publishers has already been discussed above, but there was also throughout a strong sense of the participants feeling they were part of a community with other indies; whether that was perceived as friends, business colleagues (James, Adam), someone to hang out with (Alex) or as part of a countercultural movement (Ray). A recognition was present of others in similar situations and that they could reach out to others for help or advice, or conversely be the one helping or advising (Ray), and just generally giving back to a community. Ultimately, there was a sense displayed that individual developers, consumers and the community were perceived as personal and mattered.

In terms of the primary research question, the above analysis offers a deep insight into the nascent entrepreneurial experience of the emergent indie. With regards to Gartner's (1985) framework, this theme sits most prominently within the dimension of *individual* (perception of self and other) although there are aspects of the *environment* dimension too. However, also of interest with this theme are links to antecedent actions and behaviour and apparent motivations, thus there are links to explore with Stephan, Hart and Drews. (2015) and Tuazon, Bellavitis and Filatotchev (2018) in terms of motivating factors. These areas are examined in further detail in the next chapter.

A wide number of insights and findings are illustrated above in terms of the participants' nascent entrepreneurial experience. To further summarise, the following can be considered key findings of this theme:

- **Participants demonstrated a considerable desire for autonomy and recognition**
- **The indie community was perceived as personal, important and valuable**
- Participants demonstrated a strong internal locus of control
- Publishers were often perceived as interfering and negatively influencing game development

5.5. Summary

This chapter has illustrated the presence of three distinct experiential themes emerging from the participants narrative through interpretative phenomenological analysis. The

interpretation of these themes has been conducted openly using extracts from the participants themselves. This has allowed their voice to be maintained whilst enabling interpretation of their narratives. The result is thus a greater insight into not only how they make sense of their experience of the phenomena of NVC, but also what it is like for them to be an emerging indie entrepreneur. Subsequently, the thematic findings have been further interpreted to bring additional insight and understanding of the indie entrepreneur experience, as well as tentatively situating these findings alongside the research questions. This has been conducted in an effort to adhere to the expectations of IPA as noted by Smith, Flowers and Larkin (2009: 52):

> *The analyst should provide a rich, transparent and contextualized analysis of the accounts of the participants. This should enable readers to evaluate its transferability to persons in contexts which are more, or less, similar.*

In the next chapter, these themes will be explored further in relation to the extant literature. This is crucial, as Smith, Flowers and Larkin (2009: 52) also note:

> *Further points which situate the sample in relation to the extant literature will help the reader to make that assessment. The effectiveness of the IPA study is judged by the light it sheds within this broader context.*

Finally, narrative extracts isolated from interpretation cannot communicate the detail of the participant voice, nor the nuance of a theme that has been explored using IPA. If the objective was merely to provide a voice to the participants, then their narratives would simply be transcribed verbatim. However, this is not the objective and therefore interpretation is key. Nevertheless, there is arguably still some value in being able to – at a glance – peruse a non-exhaustive selection of narrative extracts directly alongside the themes within which they are explored (presented below in Tables 7, 8 and 9), even if it serves no purpose other than to direct the reader to a more detailed and nuanced passage.

Table 7: Theme 1 and selected narrative extracts

Theme 1	Selected Narrative Extracts
'The Golden Age' Temporality	*back in those days the idea of making any money from a product was considered a non-indie thing to do. (James)* *[Life before digital distribution was]* Hard, really, really hard… *(James)* *what people might think of as 'The Golden Age' of indie dev… a world where you could create something and own it fully yourself and reap the rewards of having a huge hit (Alex)* *the visibility you got on Steam - Steam was massively different then… that definitely made it easier at that point' (Adam)* *for a while there wasn't that much on there, so it was fairly easy to get noticed. (Zoe)* *…game development is difficult, but [was] no longer as opaque, no longer as hostile, and no longer as insular. You could sit in your room or your apartment or wherever you lived, download a toolset and get going. (Ray)* *the two things that changed were the toolsets and the distribution platforms (Ray)* *I actually mailed Mark Healey and said, 'how did you get your game on Steam?' and he said, 'Oh Valve flew me out to Seattle' [laughter] 'because they liked it.' (Adam)* *there is no way that [we] could have developed anything for five years before that crowdfunding model came along. (James)* *I think crowdfunding has changed a lot… I don't know whether it would work now… (Zoe)* *coming off that indie boom I saw people do napkin math (Alex)* *…those early indies, most of them no longer... have the mythological status that a lot of them had for a few years, because now indie is so big that most people don't… have to know those people. (Ray)* *a lot of indies who are credited with these kind of masterful geniuses of breaking out actually just got really lucky, there was a time when that was possible… (Luke)* *the industry has changed so much over the 10 years we were here. It's unrecognisable (Ray)* *you now have a two-hour window in which you need to actually grab people. (Alex)*

Table 8: Theme 2 and selected narrative extracts

Theme 2	Example Narrative Extracts
'A dream of independence' The indie journey	*It was relatively new the idea that you could make games on your own (Ray)* *when I started in games around 2010, indie was sort of a dream of independence (Ray)* *I grew up with an 8-bit home computer… playing lots of games. (Alex)* *it was always somewhere in my life… messing around with the games I had instead of playing them. (Ray)* *Making games independently is by all means impossible and ridiculous… (Ray)* *the reality is that a lot of indie games are just shit. And that's something as an industry we need to be smart about and go, 'okay, yes they are, why?' Probably because it's really hard to make a videogame and if you're only one or two people then you're probably not going to be successful at that (Luke)* *we went from…'Oh indie games are this funny almost hobbyist domain of development' to this very rapid transition of them being perceived as real products… (Adam)* *that was kind of the perception shift happening around that time (Adam)* *this nascent thing where people were really starting to realise that indie games could be a big deal commercially and critically. (Adam)* *it used to be very locked down… you need a publisher …and then the App store came out and everyone went, 'Oh my god I can release my own game!' (Zoe)* *I was taught, you know, in my degree and in the workplace 'you need to be the best at doing a very specific thing and that's your value in a 300-person production' (Luke)* *…it was seeing that you could make games without commission… you didn't have to work your way up the system. You could just go 'I'm going to go and make a game on my computer now.'… that was alien to me. (Luke)* *these two guys who just went and made a game at the weekend and it gave them absolute freedom and financial access to making whatever they want (Luke)* *the golden check was 'would a publisher back this?' and the answer clearly with [my first title] was clearly no. No publisher in their right mind would have gone for that (Alex)*

Table 8 continued…

it was riskier than perhaps you'd be allowed to get away with… working for a larger scale publisher. (Alex)

You know, we never got into this to try and make a lot of money. (Adam)

a publisher would have interfered with the process to the extent that the game would not be as great as it is (James)

that for me is the non-indie world, is a lot of decisions are driven by marketing and sales… [with] the corporate publishers, the creative process is... perverted from what it might be (Alex)

I think in every prominent indie's story there is the moment of 'oh shit, I have to figure out how to survive. (Ray)

I think indie's become entrepreneurs... at some point they either have to shift into commercial life and become entrepreneurs or they don't; in which case they usually falter. (Ray)

indies have to be entrepreneurial because there's no way to survive the time you need to make a game (Ray)

that moment where the creative has to make space for the commercial. It's a very interesting moment in every indie's career (Ray)

we were totally clueless so it took us a long time to really work out you know how to do business frankly… because we didn't know anyone in the Industry. (Zoe)

I wasn't planning commercially at all - and I think a lot of indies do this - I was kind of play-acting… There was no plan. (Luke)

We could have made much more but I had no idea what I was doing, obviously. We were negotiating with Time Warner (Ray)

Table 9: Theme 3 and selected narrative extracts

Theme 3	Example Narrative Extracts
'I have this freedom' Selfhood and sociality	*the biggest difference for me was not having to ask permission. (Alex)* *we were pitching… games that were a couple of million dollars and the publishers would look at them and be like, 'this is a cool idea, it's a cool pitch, we believe you can deliver it, but if this game does really well at best we're going to double our money. It isn't worth the effort to double our money on a three-million-dollar game.' This was the point where, for me this was very frustrating (Alex)* *not a conventional videogame and was exploring areas that most videogames have not explored, so in that sense was riskier than perhaps you'd be allowed to get away with, I think. (Alex)* *if you'd said to a publisher, 'I want to spend 5 months creating a system to allow the ships rigging to be procedural and accurate because this means something to me', they'd have said no. If you'd said 'we have this art style which might not even work in video - on YouTube videos' they'd have said no (Alex)* *you didn't necessarily have to stick to a release window or didn't have to stick to a budget or stick to a timescale you know… You could never have that in a traditional game development context. (Adam)* *I don't know if they'd have been comfortable with a schedule that said like for 6 months you will see very little [laughs]. It will be Alex in a room staring into space, occasionally writing notes and stuff, and reading lots of books and things. (Alex)* *to actually be sat and going - that I'm making this game the way I want to make it, that I have this freedom - that was extremely fun (Alex)* *Some people want to make games their way, and some people want to make games. Those are different things… for a lot of independent developers, this sense of being able to plot their own course is connected to their sense of making videogames (Ray)* *these two guys who just went and made a game at the weekend and it gave them absolute freedom and financial access to making whatever they want and I was just massively jealous and was like 'I can do that' (Luke)* *amongst the developers that I knew and stuff it's a… bold move to go 'I think I can do this on my own now.' (Alex)* *fiscal success is not high on my list. What I want to do is I want games that I put out to be critically well received and well received commercially (James)* *I'd pitched a lot of [a certain genre of] games to publishers and they'd always said no, so there was a little bit of me being like 'I want to prove this genre can work. (Alex)*

Table 9 continued…

[my first indie game] was me trying to prove something (Luke)

I was pretty confident I could make something within that time frame. (Alex)

I was definitely very, very ego driven I'd say for the first, definitely for [my first indie game] (Luke)

you actually can just see indie there. Like that's independent development. It was true, it was oftentimes a little offensive, it was counterculture it was punk, it was everything against the system that they could possibly be. (Ray)

a little bit of me still believes in that, that spirit of counterculture (Ray)

for most indies there is the moment where they make that intentional decision of reaching out to that community, receiving help and then being inspired by receiving that help, to help others. (Ray)

within the indie space people give kudos to other people that do creative stuff (Zoe)

working on making the community fairer and a more inclusive place… Yeah, it felt like I'd found a purpose, right? And I think that was a big thing (Ray)

coming from commercial game development you're very much in your silo… it was only post-release of [my first indie title] that I really kind of got a sense of what the indie community was really like and got to hang out and meet people. So that was super fun. (Alex)

Scott Benson of 'Night in the Woods' [Infinite Fall (2017)] - I think it was him that summarised it, but it was basically 'make games, pay rent, help others make games pay rent. (Ray)

6. DISCUSSION

This chapter situates the findings and analysis in a wider context of the previously reviewed literature as well as bringing to bear other extant literature. It is also worth reiterating here that in an exploratory and inductive IPA study, this is not an unusual practice, as the meaning and sense-making of the participants' experiences cannot always be predicted (Smith, Flowers and Larkin, 2009). Furthermore, at the outset of this discussion, it is important to reiterate the nature of IPA research:

> *IPA does not test hypotheses, and is not usually used to build theory per se – but its analytic outcomes can be used to open up a dialogue with extant theory. (Larkin and Thompson, 2012: 103)*

As such, it is not the goal of this chapter to validate or refute existing theory, but to provide rich insights into the experience of the participants and discuss these and the thematic findings – the substantive findings – in relation to the literature. Nevertheless, opening up such a 'dialogue' can also encompass re-evaluating the parameters and relevance of theories, models and frameworks.

In discussing the findings in relation to extant literature and the research questions, it is pertinent to revisit the conclusions of the previous chapter. Whilst a number of findings were revealed, the focus here is on the three key findings that relate to the primary goal of seeking to understand the experience of the participants and the secondary goals as expressed via the remaining research questions.

Whilst all the findings are interwoven into the discussion to a certain extent, the following key points were identified in relation to the primary research question, RQ1:

1. **Temporality had a significant impact upon the nascent entrepreneurial experience of the participants in the form of 'The Golden Age' – a time of positivity for indie NVC in contrast to times before and since.**
2. **The indie community was perceived as personal, important and valuable**
3. **Participants demonstrated a considerable desire for autonomy and recognition**

The primary research question asked how nascent entrepreneurs make sense of their entrepreneurial journey. That question is answered directly through the interpretative phenomenological analysis of participants' narrative experiences in chapter 5. To reiterate, indies make sense of their experience by understanding it as part of what they believe was

The Golden Age of indie, when they were able to fulfil their ***dream of independence*** and gain their ***freedom***. These findings illustrate how indies make sense of their nascent entrepreneurship – what it is like for them – their experience. The key summaries were presented in section 5.4. Further detailed discussion in relation to RQ1 and the aims of this study can be found below in section 6.1. Additionally, section 6.11 also explores journey as process (RQ1), section 6.12 temporality as environment (RQ2) and section 6.13 the importance of the individual, selfhood and sociality (RQ3 and RQ4). RQ5 is discussed further below in section 6.14.

In the literature review, existing theory, models and frameworks were introduced relevant to this study, NVC and nascent entrepreneurship. What follows is thus a return to said literature in light of, and in relation to the findings. The objective was to gain insights into the experience of the participants, and in doing so it has been possible to add to and enhance existing models and frameworks in a qualitative and exploratory manner. Our understanding of what it is like to be an emergent indie entrepreneur in the videogames industry - what is important to them and what they do (their antecedent activities, actions behaviours and experience) has been enhanced. The findings of this interpretative phenomenological study thus complement existing research and being inductive and exploratory, provide further direction and scope for similar studies in the future.

6.1. Gartner's framework for NVC

Gartner's (1985) framework was created to outline a format for future research themes and to categorise previous themes, as well as advise future work direction (away from entrepreneur vs non-entrepreneur studies). Although an older paper, this framework is nonetheless still considered a seminal work (Brahma, Tripathi and Bijlani, 2018, Davidsson and Gruenhagen, 2020). As we have seen, this framework for describing NVC introduces four major perspectives or dimensions within which all NVC research might be organised, *individual, organisation, process and environment.* However, this thesis of nascent entrepreneurship of indies in the videogames industry revealed that for the participants, their experiences did not neatly and equally fall into place within pre-determined dimensions (as shall be discussed further below), but there were nonetheless some correlations between the themes and the dimensions of *environment (The Golden Age), process (The indie journey) and individual (Selfhood and Sociality).* As such, these dimensions and the findings are worth exploring further.

6.1.1. Journey as process

The literature review introduced how entrepreneurship is contemporaneously perceived as a process. Yet it is noted that time is not explicitly included in Gartner's (1985) framework. In addition, it is curious that temporality is generally 'conspicuously absent from empirical work supposedly devoted to understanding the emergence of new ideas, products, firms' (McMullen and Dimov, 2013: 1482). It is further noted that:

> *Prior work has thus tended to diminish the role of time in the entrepreneurial process by studying entrepreneurship as an act, as opposed to a journey that explicitly transpires over time… a shift in inquiry from act to journey may advance scholarly understanding of the entrepreneurial phenomenon. (McMullen and Dimov, 2013: 1482)*

Here then, the importance and utility of all things temporal is argued as useful, with the additional value of the journey metaphor to indicate, as per Gartner's (1985) framework, the dimension of *process*. As has been illustrated from the participant narratives, both temporality (Theme 1) and the journey (Theme 2) are crucial to making sense of the nascent entrepreneurial experience. This study therefore aligns with the argument of McMullen and Dimov (2013) and in fact goes further, to argue that a better understanding of the importance of time and journey for entrepreneurs offers greater insights into nascent entrepreneurship. A focus on temporality and process enables progress towards addressing the lack of scholarly work on entrepreneurship as journey.

New ventures are not created randomly or from passive individuals within specific environmental conditions, they are created with purpose by nascent entrepreneurs (Katz and Gartner, 1988, Shook, Priem and McGee, 2003). In the case of this study's participants, NVC occurs through the necessity of engaging with the commercial reality of the era, to continue making videogames as indies. Indeed, the indie journey illustrated through the participant narratives provides valuable insights into the passions, challenges and transformations of their entrepreneurial growth and journey towards NVC; it manifestly illustrates what it is like to take an entrepreneurial journey into the videogames industry as an emergent indie entrepreneur – the *process* of entrepreneurship.

6.1.2. Temporality as environment

A significant finding of this study indicated that temporality, that is to say 'The quality or condition of being… temporary; temporariness; relation to time' (OED Online, n.d.) is

critical, yet absent from Gartner's (1985) framework. However, it is possible to reconceptualise The Golden Age from temporal state to *environment*; perhaps 'a place in time' where forces external to both the individual and organisation are situated that influence the participants' experiences. The challenge however is in recognising that in entrepreneurial research, the environment is often taken to mean a geographical area (e.g. Rotefoss and Kolvereid, 2005, Burnett and Danson, 2017) or economic situation, yet that is not the intended use in this case. Indeed, the dimension of environment for Gartner (1985) focuses on 'accessibility of suppliers, new customers and new markets; government relationships and influences; a geographic location with good living conditions, proximity of universities, availability of land, infrastructure and transportation' (Brahma, Tripathi and Bijlani, 2018: 80).

Whilst e*nvironment* can be used as per the definition offered in the framework of Gartner, to mean 'the situation surrounding and influencing the new organization' (Gartner, 1985: 698), such an explicit lack of time in relation to environment remains more than irksome and incongruent. Nevertheless, this Golden Age as conceptualisation does fit within the subsequent definition of 'characteristics that are viewed as relatively fixed conditions imposed on the new venture from without… environmental variables' (1985: 700). Whilst such an environment as The Golden Age is a positive and enabling confluence of change, all are indeed 'from without' the new venture. More suitable therefore, is an expansion of the parameters presented by Gartner's (ibid) framework to incorporate more explicitly the notion of temporality, transience and time as a factor, regardless of whether such temporality is used to incorporate a range of technological, commercial and cultural changes or not. Such a change would thus incorporate into the framework consideration and recognition of transience and *zeitgeist*.

As environment then, there is an influential and significant impact on the participants as nascent entrepreneurs. In terms of its influence specifically on indies, existing literature from the perspective of the videogames industry is, as would be expected, rare. Much literature focuses on the perspective of the global games industry (the mainstream 'AAA' perspective) such as that of Kerr (2017). However, of note is the discussion by Whitson, Simon and Parker (2018) of indies in relation to cultural production. Whilst the main thrust of the research argues that videogame producers are more crucial than ever (yet often undervalued and dismissed by indies), there is a recognition that the environment within which indies presently find themselves (in terms of the market), is one which is a challenging place to operate and difficult to achieve any degree of sustainability. This

perspective does align with the participants narratives from this study. The participant perceptions of the post-Golden Age environment indicate a more difficult time, with a saturation of indie games and a proliferation of indies, a 'huge number of people… trying to shove games in front of journalists' (James).

In terms of entrepreneurship literature, despite an apparent lack of direct literature exploring temporality as an aspect of the nascent entrepreneurship environment (in the sense of Gartner's (1985) framework), it would nevertheless appear apposite. However, with temporality as an environmental dimension, it can nonetheless be understood in relation to other entrepreneurial studies where the environment has been considered relevant in NVC. The findings here seem to fit with previous studies which have suggested that in terms of NVC, there is increased entrepreneurial activity (Sine & David, 2003), success of entry (Sandberg & Hofer, 1987) and performance (Eisenhardt & Schoonhoven, 1990) in environmentally changing and dynamic environments (such as those relevant to this study) than in those that are more stable. Furthermore, Edelman and Yli–Renko (2010: 848) argue that:

> *entrepreneurs' perceptions …were influenced by the actual dynamism of the environment and that it was through these interpretations that the environment influenced behavior. (Edelman and Yli–Renko, 2010: 848)*

Such arguments and findings align with the participant narratives in this study regarding industry volatility during The Golden Age, as illustrated by Alex's recollection of 'an interesting time in the industry… publishers were kind of generally shitting themselves.'

6.1.3. The individual, selfhood and sociality

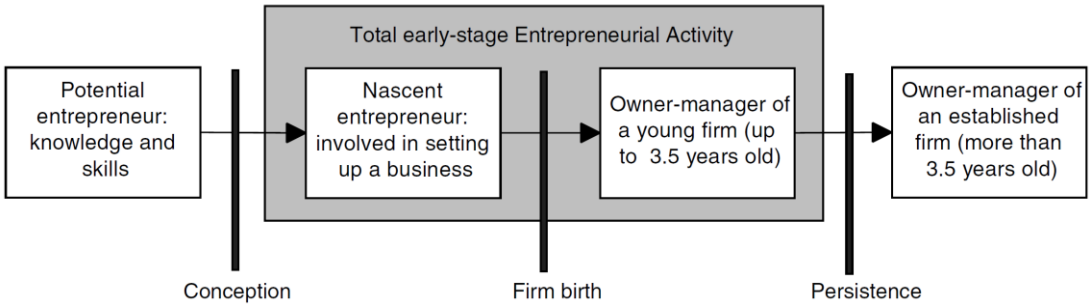
One key finding of this study illustrates how autonomy and recognition are motivators for the participants. This is discussed further below with regard to entrepreneurial motivation, however it is worth noting here that this sits comfortably within the dimension of the individual in Gartner's (1985) framework. Furthermore, other findings discussed the participants' strong internal locus of control, which also sits clearly within this area of the framework. As such, the framework is valuable for positioning these aspects of the research. However, an aspect that does not align as easily is that of sociality – relationships with others. This sociality is directly linked with the perception of self (hence its thematic position in the study) and as Ashworth (2016: 26) notes it 'can often be affirmed or undermined by others. Our identity links us to others and is provided by interaction with

others.' Thus once again it becomes difficult to position findings within the framework. However, whereas temporality could reasonably be reconceptualised as environment, sociality is not so easily shoehorned into a dimension; intrinsically it cannot sit within the individual, but environment seems too distant to encompass a community of other people. Once again there is the sense that the framework is perhaps in need of further modification or expansion of its parameters.

6.1.4. Reynolds et al. (2005) entrepreneurial process model

RQ5 asked: *To what degree are the discreet stages and transitions in Reynolds et al. (2005) process model reflected in the lived experience of the participant nascent indie entrepreneurs?* Theme 2: The indie journey, relates to this research question as it illustrates *process*; the participants' journey. The model is restated here for clarity in Figure 8.

Figure 8: Entrepreneurial process and GEM operational definitions (Figure 2 restated)
(Reynolds et al., 2005: 209)



It was found that the participants were often called to indie game development for reasons of autonomy and recognition. It was also found that they had, as would be expected, a strong interest in videogames and more importantly, a desire to make games. As such, their early journey was dominated by the product, making the videogame. At this point, they may be termed 'potential entrepreneur' in the Reynolds et al. (2005) model (above), with the 'knowledge and skills' to create a new product (though not yet the new venture), without actually having done so. The model then illustrates how, by moving through the 'conception' barrier, the 'potential entrepreneur' becomes the 'nascent entrepreneur' who is 'involved in setting up a business'. After this point, the model moves further away from the focus of this research via a further barrier of 'firm birth' to reach owner-manager of a young firm. In the literature review, it was noted that the model appeared somewhat

simplistic and did not represent that 'formation is a process, involving a series of decisions, rather than a single decision taken at a particular point in time' (Johnson, Parker and Wijbenga, 2006: 3). Whilst this remains the case here, the model nevertheless serves as a broad 'route map', but it does not convey the nuance, overlap or ambiguity that occurs for the indies who participated in this study; the conception barrier is therefore problematic. Whilst Ray colourfully described how he believed every indie goes through an 'oh shit moment', this does not represent the conception of the venture, it simply signifies a realisation, rather than a 'conception.' It signifies a realisation that there is a need to become entrepreneurial if the individual is to be able to continue developing their indie game. Whilst it arguably *may* signify greater nascent (as opposed to potential) entrepreneurial thinking, it does not necessarily mark the birth of the venture idea, the 'conception' that, as has already been discussed, relies on an unclear distinction between 'thinking' and 'doing.' As an example, when Alex talks about the creative decisions he considers for launching or promoting his game, is he 'thinking about' (potential entrepreneur) or 'doing' (nascent entrepreneur)? It would seem that 'doing' translates as something which would help generate revenue, but even this seems ambiguous and arbitrary and does not necessarily help with the example. The model may need refining to accommodate such examples; although the model has use, its relevance is broad and ambiguous. It is useful in the sense that we can categorise some clearer cases as nascent or potential entrepreneurs, but as has been demonstrated, in terms of process there is much ambiguity with regards to indies, and so it's usefulness in determining any difference between potential and nascent is limited.

6.2. Entrepreneurial motivation

Research questions RQ3 and RQ4 were chiefly concerned with motivation, the former with the claimed typical dimensions of Stephan, Hart and Drews. (2015) and the latter with antecedent factors of Tuazon, Bellavitis and Filatotchev (2018). However, it transpired that there was a significant alignment between the two that rested upon motivations of independence, autonomy and recognition. Whilst neither approach reflects the holistic experiences of the participants, this element is in alignment in the thematic findings for both. As such, Theme 3: Selfhood and Sociality, goes some way help address these questions.

As can be seen from the key findings above, significant motivators for the participants were autonomy and recognition. Participants were strongly motivated to become emergent

indie entrepreneurs in order to control the method, process and content of the games they wished to make. For some, this was in opposition to publishers who would want control over their investment, for others it was a direct response to being controlled or denied by superiors. This maps directly onto motivational factor (b) of Tuazon, Bellavitis and Filatotchev's (2018) motivational factors. Other motivational factors of Tuazon, Bellavitis and Filatotchev (ibid) did not particularly factor other than a minor reference to innovate (although financial success was sought, most were clear in that it was not a driver, but a tool to continue making games – sustainability was important to them). With further regards to these antecedents, individual-level resources and characteristics did not feature prominently from the participant narratives or interpretation, nor did institutional factors in most cases. However, market dynamism (d) and cultural dynamics (f) did manifest through the first theme of Temporality insofar as these were considered important facets of the era. However, these facets were not necessarily considered motivators. Motivation was, as mentioned above, driven by autonomy and recognition.

In terms of the opportunity-necessity concept (Shapero and Sokol, 1982, Cooper and Dunkelberg, 1987, Feeser and Dugan, 1989), it is difficult to attribute any value to this idea in relation to this study. Whilst it could be argued there is a 'pull' motivation towards the opportunities presented by The Golden Age, further evaluation disputes such a claim. For example, Alex left a successful role as a designer to, in his words, 'go indie', as he saw the timing to be right and his prominence as a game designer had grown around that time. However, whilst this may seem like being pulled towards the opportunity, he also felt frustrated with the actions of publishers turning down his ideas and pitches and cancelling titles he had worked on for years. The latter would therefore indicate dissatisfaction – a criteria of leaving by necessity (being pushed). So in this case, was Alex pushed or pulled? It seems it could be either – or both – and so the usefulness of the concept is weak. There is a similar argument to make regarding other participants and so overall the usefulness of the push-pull concept is limited in this study.

Stephan, Hart and Drews. (2015) note the binary differentiation of push-pull lacks the nuance of complex motivations. Returning to their multidimensional typologies (achievement, challenge & learning, independence & autonomy, income security & financial success and recognition & status), they note how profiling of entrepreneurs on these dimensions is scarce. Whilst this study does not claim to profile the participants in any such way, exploring the themes present in this study along with the narrative extracts of the participants offers some insights into the presence of these dimensions. It is evident

from the key findings above, that two dimensions in particular are present in the motivations for the participants: independence & autonomy (2) and recognition and status (4). In terms of (2), it has been illustrated that control over work, content, decisions and time were all important to the participants. With regards to (4), it has been illustrated that critical acclaim from consumers, peers and the media are important to the participants, as is their image from within the industry more generally. As above therefore, in relation to Tuazon, Bellavitis and Filatotchev (2018) this study demonstrates that participants illustrate motivational behaviours that sit within their existing typologies as well as those of Stephen, Hart and Drews (2015). This is important and valuable, because as noted in the literature review, Gartner (1985) points out that industries are heterogenous, and there has been little, if any research into the motivations of emergent indie entrepreneurs. Therefore, knowledge of indie motivations and where they sit within existing typologies in comparison to other industries adds value.

6.3. But what about the indie?

So, after all the narrative extracts presented, the interpretation and the analysis, what *is* indie? Zoe was so disillusioned with what appeared to be a never-ending obsession with this question that it led her to proclaim, 'Oh God, I want the word to be banned!' However, whilst this study did not necessarily set out specifically to explore, evaluate or define what indie '*means*' it is nevertheless capable of providing some further insight from the participant narratives. To recapitulate the discussion on this topic from the literature review, the suggestion was made to consider indie as a continuum whereby some indie games or developers may be strong representatives of indie, and others less so or more problematic. Therefore, one would not point at products and say, 'that is indie' or 'that is not indie' but, for example, 'that is *very* indie.' However, mention was also made of the way indies make games.

One issue became highly apparent from participant narratives in relation to this often-contentious discussion. The crux of the philosophy of the participants with regards to game development focused on the method and type of production. Firstly, the indie method of production was considered free of traditional publisher influence and undertaken with creative freedom. This in a sense captures everything, but it is worth exploring further. There is a recognition that nothing is likely totally free of influence, but this sense of freedom is considered in contrast to the restrictions and demands put upon those who work for publishers, even those 'independent' studios that are almost certainly financially

beholden to publishers. Additionally, the *method* of production is considered very important to defining the indie. Production should not be arbitrarily time-bound; although once more, there was a recognition of commercial realities insofar as 'no company in the world is going to continue working for extended periods of time at a loss - it just isn't going to happen' (James). Examples were given of very successful games created by indies that were considered complete only when the developer decided that was the case – perhaps 5 or 10 years. Furthermore, there needs to be a recognition that as an indie, one has significant advantages and disadvantages in comparison to mainstream AAA videogame development and therefore the cost and chosen type of production should be appropriate. For example, Alex notes 'if you're doing something that the AAA games are doing, you're never going to be able to polish it as much as them… you're not going to be able to compete on that level.' Finally, there is a sense that the definition of indie itself is far from immune to temporality, with its meaning changing over time. The participants of this study might be perceived as some of the progenitors of The Golden Age (or celebrities, or perhaps as videogame equivalents of the film auteur) and thus judged differently from those of the present, who experience and endure a different era with its own challenges and opportunities.

6.4. Summary

The findings of this study can be related to the models and frameworks introduced at the beginning of the thesis. However, precise alignment is not always achieved. Whilst some thematic findings are neatly accommodated within the existing dimensions of established frameworks, others are more challenging, and it becomes problematic to do so. As such, it should be recognised that models and frameworks are utilised as tools and are not buckets into which all research must be placed. Indeed, the nature of exploratory, inductive research, and certainly IPA, is to help understand the 'why' rather than the 'what' and so this thesis is intended to provide insights and vision into the life of the participant in relation to the phenomenon.

Of value would be additional qualitative research to this study, again focusing upon the specific phenomenological experience in question (the nascent indie entrepreneur) but from perspectives away from existing entrepreneurial frameworks. Whilst models and frameworks are useful, they can also limit or impose themselves upon our thinking in ways which limit the potential of exploratory inductive research.

7. CONCLUSION

This final chapter includes a reassertion of the need for this study as well as covering the contribution made in detail. Subsequently, there is acknowledgement of the study's limitations, as well as a discussion of opportunities for further research before ultimately concluding.

7.1. Reasserting the need for the study

It has been established that NVC should be defined as a process (Gartner, 1988, Amit and Muller, 1995, Reynolds et al., 2005, Gartner and Shaver, 2012, Baron and Markman, 2018, Reynolds, 2020) and that it should also be a core focus of entrepreneurship research generally (Davidsson and Gruenhagen, 2020). As an area of inquiry, nascent entrepreneurship is situated within NVC and so this study adheres to the recommendations of existing literature in the field. In addition, in the past forty years, entrepreneurship research has demonstrated a notable 'quantitative methodological bias' (McDonald et al., 2015: 22) and academics have called for further research on NVC from a qualitative and multidimensional perspective, (Gartner, 1985, Davidsson, 2016). This study addresses these concerns in being qualitative, with exploration of multiple dimensions (e.g. individual, environment, process) of NVC to address this issue. Furthermore, there are specifically calls for not just qualitative, but phenomenological research within the field of NVC (Seymour, 2006), as such is typically rare compared to other positivist theoretical perspectives (as noted by Cope, 2005, Heinze, 2013, Berglund, 2015). This point is addressed by this study in utilising interpretative phenomenological analysis (IPA) as the methodological approach. It is also recognised that nascent entrepreneurship is very much about the individual experience of entrepreneurs and therefore what is required is a personal, individual exploration of entrepreneurship (Carter, Gartner and Reynolds, 1996, Delmar and Davidsson, 2000, Reynolds et al., 2005, Castriotta et al., 2019) that can generate rich insights into experience and activities (Stephan, Hart and Drews, 2015). This study addresses such calls via IPA; as Crotty (1998) notes, phenomenological research is highly suited to acquiring personal understandings, and as also noted by Smith, Flowers and Larkin (2009: 47), IPA is focused upon 'people's understandings of their experiences.' Furthermore, Gartner and Shaver (2012) note that generalisable findings that could be applied to all individuals across all environments and all organisations do not exist and so there is a need for studies that explore industries that have received less attention from

entrepreneurship researchers. The literature review demonstrated that the videogames industry has received little attention by researchers of business, as noted in particular by Zackariasson and Wilson (2012), especially in Europe (Kerr, 2017: 11). Therefore, by looking at indies in the videogames industry (particularly the UK), this study once again addresses the recommendations of existing research and the gaps within the literature.

All of the above considerations were recognised and thus taken into account in determining the philosophical, methodological and contextual elements of this study. Table 10 (below) reproduces Table 2 from chapter 3 for clarity, illustrating both the need for the study and how this study addresses those needs:

Table 10: Addressing recommendations of extant literature (Table 2 restated)

Area	Recommendations of existing literature	This study
Field of study	Entrepreneurship research should focus on new venture creation (Gartner, 1988, Davidsson and Gruenhagen, 2020)	Focuses on nascent entrepreneurship, a notable area of enquiry within NVC
Data collection and analysis	In the entrepreneurship literature, there has been a quantitative bias and there is a need for further qualitative research (Gartner, 1985, McDonald et al., 2015: 22, Davidsson, 2016)	A qualitative, inductive, exploratory study
Theoretical perspective	Positivist perspectives dominate the field of entrepreneurship (Seymour, 2006), thus calls for wider range of theoretical perspectives, specifically more phenomenological research (Cope, 2005, Seymour, 2006, Heinze, 2013, Berglund, 2015)	Phenomenological and thus Interpretivist in nature
Methodology and Focus	In nascent entrepreneurship research, a personal, individual exploration of entrepreneurship is required (Carter, Gartner and Reynolds, 1996, Delmar and Davidsson, 2000, Reynolds et al., 2005, Stephan, Hart and Drews, 2015, Castriotta et al., 2019)	Interpretative phenomenological analysis (IPA) - highly suited to 'people's understandings of their experiences' (Smith, Flowers and Larkin, 2009: 47) and acquiring personal understandings (Crotty, 1998)

Table 10 continued

Context	In entrepreneurship research, generalisable findings that can be applied to all individuals across all environments do not exist – thus there is a need for studies that explore less researched industries (Gartner and Shaver, 2012).	Videogame industry is noted as highly lacking in research in business and finance, particularly within Europe (Kerr, 2006, 2017, Zackariasson and Wilson, 2012, Marchand and Hennig-Thurau, 2013, Melcer et al., 2015, Marchand, 2016). Accordingly, the context of this study is a less researched industry - indies within the videogame industry (focus on UK)

In summary, based on both the recommendations of academics within the field of NVC and as a result of the gaps within the literature, this research addresses process, personal experience, qualitative phenomenological inquiry, multidimensional exploration, holistic understanding of nascency and is situated in the context of an industry (videogames) that is wholly lacking entrepreneurship research.

7.2. Contribution

7.2.1. Forms of contribution

Golden-Biddle and Locke (1997, 2007) outline three ways in which a contribution to knowledge can be made: i) synthesised coherence, ii) progressive coherence and iii) noncoherence. The first of these processes refers to synthesising knowledge from different or disparate areas to 'draw connections between works and investigative streams not typically cited together to suggest the existence of undeveloped research areas' (Golden-Biddle and Locke, 1997: 1030). The second refers to 'cumulative knowledge' (ibid), building upon existing work and finally the third refers to work which, although in the same field, is 'linked by disagreement' (ibid). This thesis provides a contribution to knowledge through the second of these processes, building upon existing work, as is illustrated below from section 7.22 onwards.

A different perspective on contribution is offered by Easterby-Smith, Thorpe and Jackson (2015: 309):

> *contribution can be provided in three main forms: as new knowledge about the world… (substantive contribution), as new theories and ideas*

(theoretical contribution), or as new methods of investigation (methodological contribution).

From this perspective, this study chiefly offers substantive contribution – 'new knowledge about the world' of nascent entrepreneurship; the experience and context of the emergent indie game developer. However, there are also notable considerations for both theory and methodology too, as can be seen below throughout this chapter.

7.2.2. Key Contribution

In relation to the participants (and by extension, other nascent indie entrepreneurs via transferability and theoretical generalisation (Smith, Flowers and Larkin, 2009: 4, 51) - see also section 4.1.1 *Addressing generalisability*):

Temporality and sociality are of greater importance to indie nascent entrepreneurs than previously known.

The key contribution is therefore a substantive contribution, providing new knowledge about the world of the nascent indie entrepreneur and NVC and directly responds to RQ1. This is an important contribution for two reasons. Firstly, prior to this study it was not known what would be of significance to the participants in terms of their nascent entrepreneurial journey. Secondly, it was not known to what degree this would align with (or differ from) NVC in other industries. With regards to the former, it has been illustrated that temporality and sociality are significant. With regards to the latter, it has been illustrated that indies do differ from other industries, because the importance to them of temporality and sociality are not encompassed within Gartner's conceptual framework for NVC (see 'Further Contributions' below), despite that framework containing four dimensions comprising over 50 variables. This work is significant because it establishes there are differences within this industry and more importantly *identifies what those differences are, their significance, extent and absence from the conceptual framework.* As such, with the themes themselves, this contribution also addresses the primary research question, 'How do indie videogame developers make sense of their nascent entrepreneurial journey?' Indies make sense of that journey through the temporal and social dimensions of NVC, which are significant and important to their experience of nascent entrepreneurship.

This study did not seek to prove or disprove theories discussed in the literature review, but to shine an exploratory light into one dark void of empirical investigation, that of the indie

videogame developer as emergent and nascent entrepreneur. The exploration was conducted in relation to existing frameworks and models of nascent entrepreneurship to help improve understanding and to build upon existing work through cumulative knowledge (Golden-Biddle and Locke, 1997). This study therefore provides empirical data on the experience of nascent entrepreneurs – indie game developers within the wider videogames industry. Via themes developed through IPA of participant narratives, the study has illustrated 'what it is like' to be an indie nascent entrepreneur within the videogames industry - their lived experience. Once again, the lived experience here is used as per the definition by Smith, Flowers and Larkin to mean 'relatedness to, or involvement in, a particular event or process (phenomenon)' (2009: 60), with that process being the entrepreneurial journey of new venture creation. The themes are therefore also a substantive finding in themselves.

- 'The Golden Age' (Temporality)
- 'A dream of independence' (The indie journey)
- 'I have this freedom' (Selfhood and sociality)

The importance to these nascent entrepreneurs in the videogames industry of temporality, the dream of independence and autonomy are clear and evident through IPA of the participant narratives and provide answers to RQ1. This importance of these themes illustrates how indies make sense of their entrepreneurial journey. Furthermore, there is also here a response to RQ3 and RQ4 in terms of motivation - autonomy and recognition were evidently important factors.

The thesis therefore provides 'theoretical insight' (Miles and Huberman, 1994, Mouly and Sankaran, 2004, Robinson, 2014) into the experiences and motivations of the emergent indie developer's entrepreneurial journey in the videogames industry. Yet in addition to providing this theoretical insight and empirical data on the experience of nascent entrepreneurs, this study also provides additional contributions which are further detailed below.

7.2.3. Further contributions

Implications for Theory

The significance of temporality and sociality to nascent indie entrepreneurs has been demonstrated in this study and reiterated above as the key finding. However, despite their importance, it is crucial to note that:

Temporality and sociality are not considered within Gartner's (1985) framework for NVC

Although an older paper, Gartner's (1985) framework for NVC is nonetheless still considered a seminal work (Brahma, Tripathi and Bijlani, 2018, Davidsson and Gruenhagen, 2020).

This contribution helps to provide a response to RQ2 ('What meaning do the dimensions of individual, environment, organisation and process in Gartner's (1985) model have for indie developers in understanding their nascent entrepreneurial experience?'). A key finding demonstrates that temporality and The Golden Age had a significant impact upon the nascent entrepreneurial experiences of the participants. However, temporality is curiously absent from entrepreneurship frameworks such as that of Gartner's (1985). Whilst temporality could be reconceptualised as *environment* within the framework, other listed elements of that dimension are significantly different in focus. Thus it is useful at the very least to expand the parameters of the *environment* dimension to include explicit consideration of temporality as an element. As such, for indies, the *meaning* of a dimension such as environment relates to an aspect hitherto absent from the framework, temporality. This is important because whilst it is frequently argued that NVC should be considered a process (Ronstadt, 1984, Low and MacMillan, 1988, Amit and Muller, 1995, Lumpkin and Dess, 1996, Reynolds et al., 2005, Johnson, Parker and Wijbenga, 2006, Gartner and Shaver, 2012, Baron and Markman, 2018, Reynolds, 2020) - and is thus intrinsically chronological - temporality is an inseparable component. To have no explicit reference to temporality as an important consideration of process seems contradictory. Furthermore, explicit inclusion of temporality within an expanded/modified Gartner (1985) framework or similar would address criticism such as that of McMullen and Dimov (2013: 1482) that existing research tends to 'diminish the role of time in the entrepreneurial process by studying entrepreneurship as an act, as opposed to a journey.' Such inclusion of temporality would therefore alleviate this issue henceforth and account for the indie experience. In summary, by introducing temporality or temporariness as a factor within a seminal NVC framework such as Gartner's (1985), that framework is enhanced, to better capture the experiences of the emergent indie entrepreneurs in this study.

Similar to the absence of temporality, sociality also seems absent in any meaningful way from Gartner's framework. The importance and relevance of the indie community, helpful peers and an online countercultural movement cannot be easily captured within the

existing parameters. Whilst the dimension of *individual* clearly encompasses findings from this study concerned with autonomy and recognition, no such dimension encapsulates notions around community, particularly those of a global, technologically savvy community so ensconced within digital culture. Once again as with temporality, explicit inclusion of sociality within any new, expanded or modified frameworks for further research in NVC would seem beneficial to overall understanding of nascent entrepreneurship. If the framework is to account for indie NVC, then it needs to specifically encompass the concepts of temporality and sociality within its dimensions (whether existing dimensions such as environment, or other new dimensions).

As much as previous discussion illustrates how Gartner's (1985) framework perhaps is in need of revision or expansion, this study does however align with some other aspects of Gartner and Shaver's (2012) arguments. Whilst it has been illustrated above that this study provides empirical data in the field of nascent entrepreneurship, it does not do so in a vacuum, but in the context of the videogames industry, an industry with (as the literature review demonstrated) a distinct lack of research on business and finance (Kerr, 2006, 2017, Zackariasson and Wilson, 2012, Marchand and Hennig-Thurau, 2013, Marchand, 2016). Having undertaken research within this less explored industry, the findings illustrate that for these participants, there are temporal and social dimensions to NVC that an existing entrepreneurship research framework does not fully consider. The argument therefore that 'generalisable findings that encompass ''all entrepreneurs'' across all ''kinds of firms'' in all ''kinds of environments'' have been scarce—if not non-existent' (Gartner and Shaver, 2012: 664) is applicable to this research too, because this research has demonstrated new areas of consideration for nascent entrepreneurs that have remained unidentified within research of other industries. As such, this study recognises that whilst the findings here are 'important for some entrepreneurs, in certain situations, for certain kinds of firms' (Gartner and Shaver, 2012: 664), they are not in any sense a 'universal truth' truth of NVC that can be applied to all entrepreneurs, across all industries, at all times.

Implications for Practice

As outlined above when discussing the contribution to theory, this study explores an industry with very little previous entrepreneurship research and very, very few studies of indies within that field. As such, there is value here then for others, such as those considering starting their own venture as indie videogame developers. In terms of any given finding, the reader is able to 'evaluate its transferability to persons in contexts which are more, or less, similar' (Smith, Flowers and Larkin, 2009: 51). The themes may be

'bounded' by the group of participants, yet whilst IPA findings are not intended to be generalisable, an 'extension can be considered through theoretical generalisability, where the reader of the report is able to assess the evidence in relation to their existing professional and experiential knowledge.' (Smith, Flowers and Larkin, 2009: 4). Therefore, the issues which participants faced, the activities they undertook and the behaviours they demonstrated may highlight issues of relevance to potential entrepreneurs. Those potential entrepreneurs may well gain valuable insights from this study through exploring the experiences of the participants and the importance of the thematic findings upon those participants. Furthermore, they may gain insight into their own motivations through understanding those of the participants. As such, it is valuable here then to highlight a further finding of this study (again, with consideration of the caveats concerning generalisability) which once more provides an answer to both RQ3 and RQ4 in terms of identifying motivations:

> **Autonomy and recognition are significant and important considerations to indie nascent entrepreneurs within the videogame industry.**

Beyond practitioners, there is also value here for future researchers of NVC in the videogames industry and those for whom the industry holds importance (indie communities, publishers and others). In reference to whom might benefit from such findings, Starks and Brown Trinidad note, such an audience may include 'others whose practice would be enhanced by understanding how individuals live through and make sense of a particular experience' (2007: 1376)

Implications for Methodology

As has been previously discussed, qualitative and in particular, phenomenological research in the field of entrepreneurship is scant. Whilst IPA as a methodological approach has been in use for considerably longer than the past decade and is well utilised in many fields, as noted in the literature review it is less prevalent within business, management and entrepreneurship research. Alongside the few other IPA studies on entrepreneurship, such as that of Cope (2011) on entrepreneurial failure, this study helps to further illustrate the importance and value of IPA in the field of entrepreneurship in demonstrating the deep, personal and individual insights that can be acquired from those experiencing the phenomena explored. Such a methodological approach provides valuable complimentary understanding, supported by Berglund (2007: 89), who notes 'phenomenological knowledge in this sense does not inform so much as enlighten practice.' This

'enlightenment' thus provides complementary understanding to the other qualitative approaches and in particular, the voluminous number of quantitative, positivist studies identified by others (Gartner, 1985, McDonald et al., 2015, Davidsson, 2016). This thesis therefore helps to further demonstrate the value and importance of this methodological approach to entrepreneurship research and encourage its use in the future.

7.3. Limitations of the study

Berglund (2007) argues that the criticisms of phenomenological research are those that are typically levelled at qualitative research more generally. In this regard, many such criticisms have been addressed earlier within the discussion of philosophy, methodology and research methods (e.g. participant selection and generalisability). However, he highlights two in particular that are most relevant to phenomenological research; interpretation and an emphasis on the individual.

The first criticism is that because the findings result from the lived experiences of the participants, they are dependent upon interpretation; furthermore, that the researcher's involvement doubles such interpretation. However, this is not perceived as a problem in phenomenological research, but its basis ; as Heidegger argues, 'phenomenological inquiry is from the outset an interpretative process' (Smith, Flowers and Larkin, 2009: 38). It can also be argued that quantitative research also involves similar levels of interpretation:

> *…in defining the phenomenon to be investigated, in the reduction of variables to be studied, in the choice of indicators to be used, by the respondent who interprets the questions (e.g. in a questionnaire) and by the researcher interpretating the numerical results. Berglund (2007: 88)*

In addition to these examples, it has already been discussed how it is reasonable and logical to recognise that all research is value bound and cannot be entirely value free; eight specific areas of example were provided in which personal values may intrude upon or affect all research, as noted by (Bryman, 2012). Furthermore, the previous discussion of philosophical position already outlined how the researcher is an intimate part of the research and cannot 'step outside of oneself', hence the double hermeneutic of the researcher's interpretation of the participants interpretation. As Merleau-Ponty asserts (and Heidegger with him), there is no view from nowhere, 'from no point of view' (Merleau-Ponty, 1962). Finally on this first criticism, it is also worth reiterating here that the interpretative results of this study will be but one interpretation – no doubt other

interpretations will go in other directions and end with different results - suffice to say that one view does not necessarily invalidate the other. However, once again this is not unusual in qualitative research (Bhide, 2003), even when 'interpretations may seem more or less plausible, the interpretative element is unavoidable in the human sciences' (Berglund, 2007: 88).

The second pertinent criticism of phenomenological research according to Berglund (2007), is that of the emphasis on the individual and their experience; how it is through their interpretation that phenomena are perceived. Whilst it is undeniably the case that the focus is indeed on the individual, it can be argued that phenomenological studies 'include the greater context as a vital source of individual interpretations' (Berglund, 2007: 89). This study has also identified the significance of the 'historical and social embeddedness of people' (ibid) through emergent themes; that is to say, they are framed by temporal, social, and cultural contexts. Furthermore, it is also worth reiterating that transferability can be evaluated by a reader in terms of any given finding, 'to persons in contexts which are more, or less, similar' (Smith, Flowers and Larkin, 2009: 51).

7.4. Further research

7.4.1. Temporality and sociality: extent, influence and contextual examples

The key contribution highlights the importance of both temporality and sociality to indies. This provides an opportunity for further research in the field to explore them as important factors in NVC that have hitherto remained hidden, or at best underexplored. In this sense, there is an opportunity to explore these areas further, beyond mere arrangement within a conceptual framework. Temporality and sociality are the participants' experience of the era; the unique transient amalgamation of milieu, technology, culture and commercial state within which they operate, are influenced by, and in turn influence themselves. If we are to better understand NVC, what requires further exploration is the complex temporariness that led many participants to feel '*now is the time.'*

Temporality is central to the experience of the participants, highlighted via the theme of 'The Golden Age' in terms of their nascent entrepreneurial journey. Further studies might seek to build on the work presented here to explore other specific time periods or degrees of transiency in relation to NVC, taking into account not merely the environmental impact or influence on the creation of new ventures, but the cultural, social and technological spirit of the age. Such studies may, for example, examine a variety of different eras such as

that of the bedroom coder in the UK during the 1980s (e.g. Wade, 2016), or the European 'demoscene' in the 1990s (e.g. Reunanen and Silvast, 2009, Silvast and Reunanen, 2014).

Furthermore, such studies of participants whose nascent entrepreneurial experiences came earlier or later (in a different era), may provide enlightening contrasts and alternative perspectives on the impact of temporality to an industry or group of entrepreneurs such as indies. Or perhaps exploration of other indies' experiences within the community during said era who did not create a new venture of 'persistence' (Reynolds et al., 2005) may provide very different perceptions of nascency. Further alternative studies might explore the experiences of others associated with an industry (e.g. publishers, journalists, non-indie developers etc.) to shed further light on themes emerging from nascent indie entrepreneurs regarding The Golden Age – and from a significantly different perspective.

7.4.2. Conceptual frameworks, autonomy, recognition and other possibilities

As discussed above, Gartner's (1985) framework for NVC does not encompass temporality and sociality as discreet components. Therefore, there is clear scope to reengage with this framework, to update and enhance it via the additional consideration of temporality and sociality. Furthermore, other similar conceptual frameworks for organising entrepreneurial research would benefit from consideration of these facets which, as illustrated, are of more importance than previously thought for nascent entrepreneurial indies in this study.

The identification of autonomy and recognition being important to the participants was another contribution that offers potential for further exploration. As such, further study of these as motivating factors of emergent indies - whether in isolation or as elements of multidimensional typologies as per Stephan, Hart and Drews (2015) - would bring additional insights in to the lifeworld of the indie videogame developer. Future studies may also want to further analyse or contrast motivations of entrepreneurs across industries with those of the indie videogame developer. For example, what contrasts - or comparisons - can be made between auteurs in indie cinema to those of indie entrepreneurs in videogames development (many of which might themselves be considered auteurs)? Answers to such questions may prove valuable to better understand the lived experience of (as well as the fundamental challenges and opportunities to) both.

Within the theme of 'The indie journey', some participants felt there were two potentially significant events or key decisions within the greater process of a metaphorical journey; the perception shift (or realisation 'going indie' was viable) and the 'oh shit moment', realising

one needed to become more entrepreneurial to continue operating as an indie game developer and go on to NVC. Whilst this theme focused on the journey as process rather than dwelling upon any specific perceived events, they nevertheless provide the possibility for further research. In doing so, exploration of 'critical incidents' (Chell and Pittaway, 1998, Cope and Watts, 2000, Cope, 2005) in entrepreneurship research may provide useful insights into those events for emerging indies.

Beyond the areas suggested above, there remains still a plethora of potential areas for future research springing from this study. There are the beginnings here of a greater understanding of the indie community and its importance as a countercultural entity and cultural movement. Furthermore, from the narrative extracts, themes emerged regarding the prominence of sociality for the participants, illustrating the importance of community to the participants' early entrepreneurial experiences, an area uncaptured by existing frameworks. Finally, future work may also seek to investigate and make further use of the concept of the lifeworld fractions (Ashworth, 2016) in an IPA study of nascent entrepreneurs, from which this study has some parallels in terms of themes developed.

7.5. In closing

The experience of the indie as emergent entrepreneur has been demonstrated to be an important yet underexplored phenomenon. Although an embryonic body of work on indies has begun to emerge (Whitson, Simon and Parker, 2018, Ruffino, 2020), it is presently dispersed across disciplines even further than the multidisciplinary field of game studies (Aarseth, 2001). Existing interpretative phenomenological literature on entrepreneurship in general is scant, with less, if any directly addressing the topic of NVC and more specifically nascent entrepreneurship, despite recognition if its value (Cope, 2011, Berglund, 2015). The remaining literature regarding nascent entrepreneurship is often deemed unidimensional (Gartner, 1985, Stephan, Hart and Drews, 2015, Tuazon, Bellavitis and Filatotchev, 2018) and is outside the context of the videogames industry.

Work on NVC such as that by Gartner (1985) and Reynolds et al. (2005, 2020) provide useful frameworks and models to help orientate NVC research, but these do not tell the whole story. This study finds that for the participants, their experience is much more nuanced, and provides deeper insights that require expanded parameters of those models and frameworks. As Berglund (2015: 482) notes: 'studies of the entrepreneurial life-world can more generally be used to criticize and add nuance to existing theories.' Thus the

thematic notions of *The Golden Age*, *A dream of independence* and *I have this freedom* illustrated by the participant narratives, are valuable in aiding our understanding of what the experience is like to be an emergent indie; they are a nascent entrepreneur starting a journey as an indie game developer, seeking autonomy and recognition amongst a community of like-minded others.

Finally, the experiences explored here not only provide rich insights into new venture creation through enhancing understanding, models and frameworks. They unveil the world of the emergent indie entrepreneur, provide new roads for exploration and reveal previously hidden vistas of nascent entrepreneurship.

BIBLIOGRAPHY

2D BOY, 2008. *World of Goo [CD-ROM]. PC*. 2D Boy.

AARSETH, E., 2001. Computer Game Studies, Year One. *Game Studies: the international journal of computer game research* [online]. 1 (1). Available from: http://www.gamestudies.org/0101/editorial.html [Accessed 20 Oct 2015].

AARSETH, E., 2015. Meta-game studies. *Game Studies: the international journal of computer game research* [online]. 15 (1). Available from: http://gamestudies.org/1501/articles/editorial.

ADVENT DEVELOPMENT, 2020. *World of Warcraft - MMO Populations & Player Counts* [online]. [online]. Available from: https://mmo-population.com/r/wow/ [Accessed 20 Dec 2020].

AJZEN, I., 1985. From Intentions to Actions: A Theory of Planned Behavior. In: J. KUHL and J. BECKMANN, eds. *Action Control: From Cognition to Behavior* [online]. Berlin, Heidelberg: Springer. pp. 11–39. Available from: https://doi.org/10.1007/978-3-642-69746-3_2 [Accessed 18 Mar 2020].

AJZEN, I., 1991. The theory of planned behavior. *Organizational behavior and human decision processes*. 50 (2), pp. 179–211.

AJZEN, I. and FISHBEIN, M., 1980. *Understanding attitudes and predicting social behavior*. Pbk. ed. Englewood Cliffs, N.J: Prentice-Hall.

AMIT, R. and MULLER, E., 1995. "Push" and "Pull" Entrepreneurship. *Journal of Small Business & Entrepreneurship*. 12 (4), pp. 64–80.

AMSTRAD LIMITED, 2015. *Amstrad Products Archive* [online]. [online]. Available from: http://www.amstrad.com/products/archive/index.html [Accessed 31 Dec 2015].

ANDERSON, A.R. and MILLER, C.J., 2003. "Class matters": human and social capital in the entrepreneurial process. *The Journal of Socio-Economics*. 32 (1), pp. 17–36.

ANDERSON, C.A., GENTILE, D.A., and BUCKLEY, K.E., 2007. *Violent Video Game Effects on Children and Adolescents: Theory, Research, and Public Policy*. Oxford University Press.

ASHWORTH, P.D., 2016. The lifeworld – enriching qualitative evidence. *Qualitative Research in Psychology*. 13 (1), pp. 20–32.

Atari: Game Over, 2014. Available from: http://www.imdb.com/title/tt3715406/ [Accessed 19 Mar 2019].

BAILEY, D., 2018. With $4.3 billion in sales, 2017 was Steam's biggest year yet. *PCGamesN* [online]. Available from: https://www.pcgamesn.com/steam-revenue-2017 [Accessed 28 Jan 2021].

BAKER, T., 2018. The Complete History of Indie Games. *The Indie Game Website*. Blog [online]. 19 October. Available from: https://www.indiegamewebsite.com/2018/10/19/the-complete-history-of-indie-games/ [Accessed 7 Mar 2019].

BARON, R.A., 2007. Behavioral and cognitive factors in entrepreneurship: entrepreneurs as the active element in new venture creation. *Strategic Entrepreneurship Journal*. 1 (1–2), pp. 167–182.

BARON, R.A. and MARKMAN, G.D., 2018. Toward a process view of entrepreneurship: The changing impact of individual-level variables across

phases of new firm development. In: *Current topics in management*. Routledge. pp. 45–63.
BARTLE, R., 2004. Newbie induction: How poor design triumphs in virtual worlds. *Other Players*.
BERGLUND, H., 2007. Researching entrepreneurship as lived experience. In: *Handbook of qualitative research methods in entrepreneurship*. pp. 75–93.
BERGLUND, H., 2015. Between cognition and discourse: phenomenology and the study of entrepreneurship. *International Journal of Entrepreneurial Behavior & Research*. 21 (3), pp. 472–488.
BHIDE, A., 2003. *The Origin and Evolution of New Businesses*. OUP USA.
BIRD, B., 1988. Implementing Entrepreneurial Ideas: The Case for Intention. *The Academy of Management Review*. 13 (3), p. 442.
BIRD, B., 1993. *Demographic approaches to entrepreneurship: the role of experience and background. Advances in Entrepreneurship, Firm Emergence, and Growth*. JAI Press, Greenwich, CT.
BLIZZARD ENTERTAINMENT, 2004. *World of Warcraft [Online]. PC*. Blizzard Entertainment.
BOSMA, N., WENNECKERS, S., and AMORÓS, J.E., 2011. GEM 2011 Extended Report: Entrepreneurs and entrepreneurial employees across the globe. *Research Association (GERA)*.
BRAHMA, M., TRIPATHI, S.S., and BIJLANI, S., 2018. New Venture Creation: From Gartner to the Present. In: G. JAVADIAN, V.K. GUPTA, D.K. DUTTA, G.C. GUO, A.E. OSORIO and B. OZKAZANC-PAN, eds. *Foundational Research in Entrepreneurship Studies: Insightful Contributions and Future Pathways* [online]. Cham: Springer International Publishing. pp. 77–102. Available from: https://doi.org/10.1007/978-3-319-73528-3_5 [Accessed 19 Jan 2021].
BROCKI, J.M. and WEARDEN, A.J., 2006. A critical evaluation of the use of interpretative phenomenological analysis (IPA) in health psychology. *Psychology & Health*. 21 (1), pp. 87–108.
BRYCE, J. and RUTTER, J., 2003. The gendering of computer gaming: Experience and space. *LSA PUBLICATION*. 79, pp. 3–22.
BRYMAN, A., 2004. Qualitative research on leadership: A critical but appreciative review. *The Leadership Quarterly*. 15 (6), pp. 729–769.
BRYMAN, A., 2012. *Social research methods*. 4th ed. Oxford ; New York: Oxford University Press.
BURNETT, K.A. and DANSON, M., 2017. Enterprise and entrepreneurship on islands and remote rural environments. *The International Journal of Entrepreneurship and Innovation*. 18 (1), pp. 25–35.
BYCER, J., 2018. *Evolving the Game Industry: Indies - Game Wisdom* [online]. [online]. Available from: https://web.archive.org/web/20180509220445/http://game-wisdom.com/series/evolving-game-industry-indies [Accessed 13 Jan 2021].
BYGRAVE, W.D., 1989. The Entrepreneur ship Paradigm (I): A Philosophical Look at Its Research Methodologies. *Entrepreneurship Theory and Practice*. 14 (1), pp. 7–26.
CAOILI, E., 2012. Steam Greenlight open for business and accepting submissions. Blog [online]. 30 August. Available from: /view/news/176833/Steam_Greenlight_open_for_business_and_accepting_submissions.php.

CARSRUD, A. and BRÄNNBACK, M., 2011. Entrepreneurial Motivations: What Do We Still Need to Know? *Journal of Small Business Management*. 49 (1), pp. 9–26.
CARTER, N.M., GARTNER, W.B., and REYNOLDS, P.D., 1996. Exploring start-up event sequences. *Journal of Business Venturing*. 11 (3), pp. 151–166.
CARTER, N.M., GARTNER, W.B., SHAVER, K.G., and GATEWOOD, E.J., 2003. The career reasons of nascent entrepreneurs. *Journal of Business Venturing*. 18 (1), pp. 13–39.
CASSON, M., 2010. *Entrepreneurship: theory, networks, history*. Cheltenham: Edward Elgar.
CASTRIOTTA, M., LOI, M., MARKU, E., and NAITANA, L., 2019. What's in a name? Exploring the conceptual structure of emerging organizations. *Scientometrics*. 118 (2), pp. 407–437.
CAVANAGH, S., 1997. Content analysis: concepts, methods and applications. *Nurse researcher*. 4 (3), pp. 5–13.
CHARMAZ, K., 2006. *Constructing grounded theory*. London ; Thousand Oaks, Calif: Sage Publications.
CHELL, E. and PITTAWAY, L., 1998. A study of entrepreneurship in the restaurant and café industry: exploratory work using the critical incident technique as a methodology. *International Journal of Hospitality Management*. 17 (1), pp. 23–32.
CLARKE, J.S. and HOLT, R., 2019. Images of entrepreneurship: Using drawing to explore entrepreneurial experience. *Journal of Business Venturing Insights*. 11, p. e00129.
COBBETT, R., 2017. From shareware superstars to the Steam gold rush: How indie conquered the PC. *PC Gamer*. Blog [online]. 23 September. Available from: https://www.pcgamer.com/from-shareware-superstars-to-the-steam-gold-rush-how-indie-conquered-the-pc/.
COFFIELD, F. and MACDONALD, R., 1991. *Risky Business?: Youth And The Enterprise Culture*. 1 edition. London ; New York: Routledge.
COHEN, S., 1984. *ZAP!: The Rise and Fall of Atari*. Philadelphia, Pa.? Xlibris Corporation.
COLWELL, J. and PAYNE, J., 2000. Negative correlates of computer game play in adolescents. *British Journal of Psychology*. 91 (3), pp. 295–310.
CONGER, J.A., 1998. Qualitative research as the cornerstone methodology for understanding leadership. *The Leadership Quarterly*. 9 (1), pp. 107–121.
COOPER, A.C. and DUNKELBERG, W.C., 1987. Entrepreneurial Research: Old Questions, New Answers and Methodological Issues. *American Journal of Small Business*. 11 (3), pp. 11–24.
COPE, J., 2005. Researching Entrepreneurship through Phenomenological Inquiry: Philosophical and Methodological Issues. *International Small Business Journal: Researching Entrepreneurship*. 23 (2), pp. 163–189.
COPE, J., 2011. Entrepreneurial learning from failure: An interpretative phenomenological analysis [Open Access]. *Journal of Business Venturing*. 26 (6), pp. 604–623.
COPE, J. and WATTS, G., 2000. Learning by doing – An exploration of experience, critical incidents and reflection in entrepreneurial learning. *International Journal of Entrepreneurial Behavior & Research*. 6 (3), pp. 104–124.

CORNELL, J., 2013. *Proof: Gameplay is More Important Than Graphics* [online]. [online]. Available from: https://www.gameskinny.com/njq5j/proof-gameplay-is-more-important-than-graphics [Accessed 2 Jul 2019].
COSTIKYAN, G., 2000. The Scratchware Manifesto. *Home of the Underdogs* [online]. Available from: http://www.homeoftheunderdogs.net/scratch.php [Accessed 12 Feb 2020].
COSTIKYAN, G., 2005. *Death to the Games Industry, Part I | Dungeons & Dollars | The Escapist* [online]. [online]. Available from: http://www.escapistmagazine.com/articles/view/video-games/issues/issue_8/50-Death-to-the-Games-Industry-Part-I [Accessed 24 Mar 2019].
CRAWFORD, G. and GOSLING, V.K., 2005. Toys for Boys? Women's Marginalization and Participation As Digital Gamers. *Sociological Research Online* [online]. 10 (1). Available from: http://www.socresonline.org.uk/10/1/crawford.html [Accessed 18 Jul 2017].
CRESWELL, J.W., 1998. *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
CRESWELL, J.W. and CRESWELL, J.D., 2018. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 5th ed. Thousand Oaks: SAGE Publications, Inc.
CRESWELL, J.W. and CRESWELL, J.W., 2007. *Qualitative inquiry & research design: choosing among five approaches*. 2nd ed. Thousand Oaks: Sage Publications.
CRESWELL, J.W. and POTH, C.N., 2018. *Qualitative inquiry & research design: choosing among five approaches*. Fourth edition. Los Angeles: SAGE.
CROTTY, M.J., 1998. *The Foundations of Social Research: Meaning and Perspective in the Research Process*. London ; Thousand Oaks, Calif: Sage Publications Ltd.
CURLEY, M. and FORMICA, P., 2013. Capitalizing on Open Innovation 2.0. In: M. CURLEY and P. FORMICA, eds. *The Experimental Nature of New Venture Creation* [online]. Cham: Springer International Publishing. pp. 23–33. Available from: http://link.springer.com/10.1007/978-3-319-00179-1_3 [Accessed 6 Oct 2020].
DAVIDSSON, P., 2016. *Researching Entrepreneurship* [online]. Cham: Springer International Publishing. Available from: http://link.springer.com/10.1007/978-3-319-26692-3 [Accessed 26 Apr 2020].
DAVIDSSON, P. and GRUENHAGEN, J.H., 2020. Fulfilling the Process Promise: A Review and Agenda for New Venture Creation Process Research. *Entrepreneurship Theory and Practice*. p. 1042258720930991.
DAWSON, C. and HENLEY, A., 2012. "Push" versus "pull" entrepreneurship: an ambiguous distinction? *International Journal of Entrepreneurial Behavior & Research*. 18 (6), pp. 697–719.
DE AGUILERA, M. and MENDIZ, A., 2003. Video games and education:(Education in the Face of a "Parallel School"). *Computers in Entertainment (CIE)*. 1 (1), p. 1.
DELLAFAVE, R., 2013. A No-Name Developer's Guide to Succeeding on Kickstarter. *Game Development Envato Tuts+* [online]. Available from: https://gamedevelopment.tutsplus.com/articles/a-no-name-developers-guide-to-succeeding-on-kickstarter--gamedev-10892 [Accessed 12 Oct 2020].

DELLA-GIUSTA, M. and KING, Z., 2009. Enterprise Culture. In: A. BASU, M. CASSON, N. WADESON and B. YEUNG, eds. *The Oxford Handbook of Entrepreneurship* [online]. Oxford University Press. Available from: http://oxfordhandbooks.com/view/10.1093/oxfordhb/9780199546992.001.0001/oxfordhb-9780199546992-e-24 [Accessed 2 Apr 2020].

DELMAR, F. and DAVIDSSON, P., 2000. Where do they come from? Prevalence and characteristics of nascent entrepreneurs. *Entrepreneurship & Regional Development*. 12 (1), pp. 1–23.

DEMRUTH, 2017. *Antichamber [Online]*. *PC*. Demruth.

DEPARTMENT FOR CULTURE, MEDIA AND SPORT, 2016. Creative Industries Economic Estimates. [online]. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/523024/Creative_Industries_Economic_Estimates_January_2016_Updated_201605.pdf [Accessed 7 Aug 2017].

DETIENNE, D.R., 2010. Entrepreneurial exit as a critical component of the entrepreneurial process: Theoretical development. *Journal of Business Venturing*. 25 (2), pp. 203–215.

DONOVAN, T., 2010. *Replay: The History of Video Games*. Illustrated edition. East Sussex, England: Yellow Ant Media Ltd.

DORMANN, C., WHITSON, J.R., and NEUVIANS, M., 2013. Once More With Feeling: Game Design Patterns for Learning in the Affective Domain. *Games and Culture*. 8 (4), pp. 215–237.

DRING, C., 2015. UK video game sales rose 7.5% in 2014. *MCV UK* [online]. Available from: http://www.mcvuk.com/news/read/uk-video-game-sales-rose-7-5-in-2014/0143433 [Accessed 14 Dec 2015].

DUKES, S., 1984. Phenomenological methodology in the human sciences. *Journal of Religion and Health*. 23 (3), pp. 197–203.

DUTTON, F., 2012. What is Indie? *Eurogamer*. Blog [online]. 18 April. Available from: https://www.eurogamer.net/articles/2012-04-16-what-is-indie [Accessed 12 Oct 2020].

EASTERBY-SMITH, M., THORPE, R., and JACKSON, P., 2015. *Management and business research*. 5th edition. Los Angeles: SAGE.

EASTERBY-SMITH, M., THORPE, R., and LOWE, A., 1991. Management Research: an introduction. *Management research: An introduction*.

EASTERBY-SMITH, M., THORPE, R., and LOWE, A., 2001. *Management Research: An Introduction*. 2 edition. London: SAGE Publications Ltd.

EASTERBY-SMITH, M., THORPE, R., and LOWE, A., 2002. *Management Research: An Introduction*. London: Sage.

EATOUGH, V. and SHAW, K., 2019. “It’s like having an evil twin”: an interpretative phenomenological analysis of the lifeworld of a person with Parkinson’s disease. *Journal of Research in Nursing*. 24 (1–2), pp. 49–58.

EDELMAN, L. and YLI–RENKO, H., 2010. The Impact of Environment and Entrepreneurial Perceptions on Venture-Creation Efforts: Bridging the Discovery and Creation Views of Entrepreneurship. *Entrepreneurship Theory and Practice*. 34 (5), pp. 833–856.

EDELMAN, L.F., BRUSH, C.G., MANOLOVA, T.S., and GREENE, P.G., 2010. Start-up Motivations and Growth Intentions of Minority Nascent Entrepreneurs. *Journal of Small Business Management*. 48 (2), pp. 174–196.

EDWARDS, R., 2006. The Economics of Game Publishing. *IGN* [online]. Available from: http://uk.ign.com/articles/2006/05/06/the-economics-of-game-publishing [Accessed 24 Dec 2015].
ELLIOT, P., 2010. Introversion's Mark Morris. *GamesIndustry.biz* [online]. Available from: https://www.gamesindustry.biz/articles/2010-08-19-introversions-mark-morris-interview [Accessed 7 Mar 2019].
ELO, S. and KYNGÄS, H., 2008. The qualitative content analysis process. *Journal of Advanced Nursing*. 62 (1), pp. 107–115.
FARRIMOND, D., 2011a. *Technology that changed gaming #2: The Commodore Amiga | Blitter and Twisted* [online]. [online]. Available from: http://www.blitterandtwisted.com/2011/04/technology-that-changed-gaming-2-the-commodore-amiga.html [Accessed 31 Dec 2015].
FARRIMOND, D., 2011b. *Technology that changed gaming #5: The 3Dfx Voodoo accelerator | Blitter and Twisted* [online]. [online]. Available from: http://www.blitterandtwisted.com/2011/02/technology-that-changed-gaming-5-3dfx.html [Accessed 31 Dec 2015].
FEESER, H.R. and DUGAN, K.W., 1989. Entrepreneurial motivation: a comparison of high and low growth high tech founders. *Frontiers of entrepreneurship research*. 9 (1), pp. 13–27.
FRANCIS, T., 2012. Notch on why Minecraft still isn't on Steam. *PC Gamer* [online]. Available from: http://www.pcgamer.com//notch-on-why-minecraft-still-isnt-on-steam/ [Accessed 24 Dec 2015].
FRIEDMAN, A., 2015. The Role of Visual Design in Game Design. *Games and Culture*. 10 (3), pp. 291–305.
FULLERTON, T., 2014. *Game Design Workshop: A Playcentric Approach to Creating Innovative Games, Third Edition*. CRC Press.
GALYONKIN, S., 2015a. On Early Access games: Do you want to know more? *Medium* [online]. Available from: https://medium.com/steam-spy/on-early-access-games-39aed2b8f82d [Accessed 27 Dec 2015].
GALYONKIN, S., 2015b. On #Indiepocalypse:What is really killing indie games: Do you want to know more? *Medium* [online]. Available from: https://galyonk.in/on-indiepocalypse-what-is-really-killing-indie-games-3da3c3a1ea76 [Accessed 27 Dec 2015].
GALYONKIN, S., 2021. Steamspy Monthly Summaries. *SteamSpy - All the data about Steam games* [online]. Available from: https://steamspy.com/year/ [Accessed 5 Jan 2021].
GARTENBERG, C., 2020. Google is launching a Stadia Makers program to attract more indie developers. *The Verge* [online]. Available from: https://www.theverge.com/2020/3/23/21191361/google-stadia-makers-indie-developers-release-games-funding-dev-kits [Accessed 2 Apr 2020].
GARTNER, W.B., 1985. A Conceptual Framework for Describing the Phenomenon of New Venture Creation. *Academy of Management Review*. 10 (4), pp. 696–706.
GARTNER, W.B., 1988. "Who Is an Entrepreneur?" Is the Wrong Question. *American Journal of Small Business*. 12 (4), pp. 11–32.
GARTNER, W.B. and SHAVER, K.G., 2012. Nascent entrepreneurship panel studies: progress and challenges. *Small Business Economics*. 39 (3), pp. 659–665.
GARTNER, W.B., SHAVER, K.G., CARTER, N.M., and REYNOLDS, P.D., 2004. Foreword. In: W.B. GARTNER, K.G. SHAVER, N.M. CARTER and P.D.

REYNOLDS, eds. *The handbook of entrepreneurial dynamics: The process of business creation*. Thousand Oaks, CA: Sage Publications. pp. ix–xxiii.
GEE, J.P., 2004. *What video games have to teach us about learning and literacy*. 1st ed. New York, NY: Palgrave Macmillan.
GIOIA, D.A., CORLEY, K.G., and HAMILTON, A.L., 2012. Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organizational Research Methods*. 16 (1), pp. 15–31.
GIORGI, A., 1975. An Application of Phenomenological Method in Psychology. In: A. GIORGI, C. FISCHER and E. MURRAY, eds. *Duquesne Studies in Phenomenological Psychology* [online]. Pittsburgh: Duquesne University Press. pp. 82–103. Available from: https://www.pdcnet.org/pdc/bvdb.nsf/purchase?openform&fp=dspp&id=dspp_1975_0002_0082_0103 [Accessed 1 Feb 2021].
GIORGI, A., 1997. The Theory, Practice, and Evaluation of the Phenomenological Method as a Qualitative Research Procedure. *Journal of Phenomenological Psychology*. 28 (2), pp. 235–260.
GLASER, B.G. and STRAUSS, A.L., 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Transaction Publishers.
GNADE, M., 2010. What Makes an Indie Game…Indie? *VentureBeat*. Blog [online]. 13 July. Available from: https://venturebeat.com/2010/07/13/what-makes-an-indie-gameindie/ [Accessed 12 Oct 2020].
GOLDEN-BIDDLE, K. and LOCKE, K., 1997. Constructing Opportunities for Contribution: Structuring Intertextual Coherence and 'Problematizing' in Organizational Studies. *The Academy of Management Journal*. 40 (5), pp. 1023–1062.
GOLDEN-BIDDLE, K. and LOCKE, K., 2007. *Composing Qualitative Research* [online]. Thousand Oaks, California: SAGE Publications, Inc. Available from: http://methods.sagepub.com/book/composing-qualitative-research [Accessed 19 Jan 2021].
GOLDFARB, B.A., 2013. GTA 5 Makes $800 Million in One Day. *IGN* [online]. Available from: http://uk.ign.com/articles/2013/09/18/gta-5-makes-800-million-in-one-day [Accessed 14 Dec 2015].
GORDON, L., 2019. Indie game makers open up about the money they actually make. *The Verge* [online]. Available from: https://www.theverge.com/2019/10/9/20903139/indie-game-developers-creators-money-funding [Accessed 12 Oct 2020].
GRABARCZYK, P. and GARDA, M.B., 2016. Is Every Indie Game Independent? Towards the Concept of Independent Game. *Game Studies* [online]. 16 (1). Available from: http://gamestudies.org/1601/articles/Gardagrabarczyk/ [Accessed 12 Oct 2020].
GRAY, D.E., 2004. *Doing Research in the Real World*. London; Thousand Oaks, CA: SAGE Publications Ltd.
GRAY, D.E., 2013. *Doing Research in the Real World*. Third Edition. London: SAGE Publications Ltd.
GRBICH, C., 2012. *Qualitative Data Analysis: An Introduction*. 2nd edition. London; Thousand Oaks, Calif: Sage Publications Ltd.
GRIGGS, B., 2011. *The Commodore 64, that '80s computer icon, lives again - CNN.com* [online]. [online]. Available from: http://edition.cnn.com/2011/TECH/gaming.gadgets/05/09/commodore.64.reborn/index.html [Accessed 19 Mar 2019].

GUERNSEY, L., 2001. Women Play Games Online in Larger Numbers Than Men. *The New York Times*. p. 4.
GUEST, G., BUNCE, A., and JOHNSON, L., 2006. How Many Interviews Are Enough? *Field Methods - FIELD METHOD*. 18, pp. 59–82.
GUNTER, B., 2016. *Does Playing Video Games Make Players More Violent?* Springer.
HAND, M. and MOORE, K., 2006. Community, identity and digital games. In: J. RUTTER and J. BRYCE, eds. *Understanding digital games*. pp. 166–182.
HANDRAHAN, M., 2014. Valve: Some Early Access games will never be finished. *GamesIndustry.biz* [online]. Available from: http://www.gamesindustry.biz/articles/2014-06-05-valve-some-early-access-games-will-never-be-finished [Accessed 27 Dec 2015].
HANSEN, D., 2016. *Game On!: Video Game History from Pong and Pac-Man to Mario, Minecraft, and More*. St Martin's Press.
HARPER, D. and THOMPSON, A.R., 2011. *Qualitative Research Methods in Mental Health and Psychotherapy: A Guide for Students and Practitioners*. John Wiley & Sons.
HARRIS, C., 2017. Your Indie Game Will Flop and You Will Lose Money. Blog [online]. 23 June. Available from: https://www.positech.co.uk/cliffsblog/2017/06/23/your-indie-game-will-flop-and-you-will-lose-money/ [Accessed 12 Oct 2020].
HEINZE, I., 2013. Entrepreneur sense-making of business failure. *Small Enterprise Research*. 20 (1), pp. 21–39.
HERZ, J.C., 1997. *Joystick nation: how videogames ate our quarters, won our hearts, and rewired our minds*. 1st ed. Boston: Little, Brown, and Co.
HJORTH, D., JONES, C., and GARTNER, W.B., 2008. Introduction for 'Recreating/Recontextualising Entrepreneurship'. *Scandinavian Journal of Management*. 24 (2), pp. 81–84.
HOUGHTON, D., 2014. Digital console gaming is not as big as you think. So how do we fix that? *GamesRadar+* [online]. Available from: http://www.gamesradar.com/digital-console-gaming-not-big-you-think-so-how-do-we-fix/ [Accessed 17 Nov 2015].
HRUSKA, J., 2013. *Another Xbox One 180: Microsoft will allow indie games to be self-published - ExtremeTech* [online]. [online]. Available from: https://www.extremetech.com/gaming/162286-xbox-one-180-indie-games-can-be-self-published-on-the-xbox-one-no-expensive-dev-hardware-required.
HYCNER, R.H., 1985. Some guidelines for the phenomenological analysis of interview data. *Human Studies*. 8 (3), pp. 279–303.
INFINITE FALL, 2017. *Night in the Woods [Online]. PC*. Finji.
INFINITY WARD, 2003. *Call of Duty [Online]. PC*. Activision.
INTRIC8, 2016. Atari ST Computer Sales and Marketshare: A Comparison - AmigaLove. [online]. Available from: https://www.amigalove.com/viewtopic.php?t=131 [Accessed 2 Feb 2021].
IUPPA, N. and BORST, T., 2012. *End-to-End Game Development: Creating Independent Serious Games and Simulations from Start to Finish*. CRC Press.
JACK, S.L. and ANDERSON, A.R., 2002. The effects of embeddedness on the entrepreneurial process. *Journal of Business Venturing*. 17 (5), pp. 467–487.

JOHNSON, P.S., PARKER, S.C., and WIJBENGA, F., 2006. Nascent Entrepreneurship Research: Achievements and Opportunities. *Small Business Economics*. 27 (1), pp. 1–4.
JON PEDDIE RESEARCH, 2014. *PC Gaming Market Holds Lead Over Consoles - Comments - Press Releases* [online]. [online]. Available from: http://jonpeddie.com/press-releases/details/pc-gaming-market-holds-lead-over-consoles [Accessed 31 Dec 2015].
JUUL, J., 2010. *A casual revolution: reinventing video games and their players*. Cambridge, MA: MIT Press.
JUUL, J., 2019. *Handmade Pixels: Independent Video Games and the Quest for Authenticity*. MIT Press.
KATZ, J. and GARTNER, W., 1986. *Organization level perspectives on organization creation*. Working paper.
KATZ, J. and GARTNER, W.B., 1988. Properties of Emerging Organizations. *Academy of Management Review* [online]. Available from: https://journals.aom.org/doi/abs/10.5465/amr.1988.4306967 [Accessed 26 Apr 2020].
KELLY, S., VOJTECH, K., ISRAILIDIS, J., MALONE, N., and BUTLER, S., 2020. Digital Supply Chain Management in the Videogames Industry: A Systematic Literature Review. *The Computer Games Journal*.
KEMPSTER, S. and COPE, J., 2010. Learning to lead in the entrepreneurial context. *International Journal of Entrepreneurial Behavior & Research*. 16 (1), pp. 5–34.
KERR, A., 2006. *The business and culture of digital games: gamework/gameplay*. London ; Thousand Oaks, Calif: SAGE.
KERR, A., 2017. *Global Games: Production, Circulation and Policy in the Networked Era*. 1 edition. London ; New York: Routledge.
KILBY, P., 1971. *Hunting the Heffalump* [online]. Rochester, NY: Social Science Research Network. SSRN Scholarly Paper No. ID 1497763. Available from: https://papers.ssrn.com/abstract=1497763 [Accessed 19 Mar 2020].
KING, G., 2005. *American independent cinema*. London: Tauris.
KISFALVI, V., 2002. The entrepreneur's character, life issues, and strategy making: A field study. *Journal of Business Venturing*. 17 (5), pp. 489–518.
KNIGHT, G., 2018. *Commodore-Amiga Sales Figures* [online]. [online]. Available from: https://web.archive.org/web/20180927041337/http://www.amigahistory.plus.com/sales.html [Accessed 19 Jan 2020].
KOHLER, C., 2007. On 'Videogame' Versus 'Video Game'. *Wired* [online]. Available from: https://www.wired.com/2007/11/on-videogame-ve/ [Accessed 29 Jan 2021].
KONDRACKI, N.L., WELLMAN, N.S., and AMUNDSON, D.R., 2002. Content Analysis: Review of Methods and Their Applications in Nutrition Education. *Journal of Nutrition Education and Behavior*. 34 (4), pp. 224–230.
KOSTER, R., 2005. *A Theory of Fun for Game Design*. O'Reilly Media, Inc.
KROTOSKI, A., 2004. *Chicks and joysticks: An exploration of women and gaming*. ELSPA.
KUNZELMAN, C., 2020. *What Does It Really Mean to Be an Indie Game?* [online]. [online]. Available from: https://www.vice.com/en/article/epgnjn/jesper-juul-handmade-pixels-review [Accessed 20 Jan 2020].

KUZEL, A.J., 1992. Sampling in qualitative inquiry. In: *Doing qualitative research*. Thousand Oaks, CA, US: Sage Publications, Inc. pp. 31–44.
LARKIN, M. and THOMPSON, A., 2012. Interpretative phenomenological analysis. *Qualitative research methods in mental health and psychotherapy: a guide for students and practitioners*. pp. 99–116.
LIÑÁN, F. and FAYOLLE, A., 2015. A systematic literature review on entrepreneurial intentions: citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*. 11 (4), pp. 907–933.
LINCOLN, Y.S. and GUBA, E.G., 1985. *Naturalistic inquiry*. Sage.
LIPKIN, N., 2012. Examining Indie's Independence: The Meaning of" Indie" Games, the Politics of Production, and Mainstream Cooptation. *Loading...* [online]. 7 (11). Available from: http://journals.sfu.ca/loading/index.php/loading/article/viewArticle/122 [Accessed 12 Dec 2015].
LOW, M.B., 2001. The Adolescence of Entrepreneurship Research: Specification of Purpose. *ENTREPRENEURSHIP THEORY and PRACTICE*. p. 10.
LOW, M.B. and MACMILLAN, I.C., 1988. Entrepreneurship: Past research and future challenges. *Journal of management*. 14 (2), pp. 139–161.
LUMPKIN, G.T. and DESS, G.G., 1996. Clarifying the Entrepreneurial Orientation Construct and Linking It To Performance. *Academy of Management Review* [online]. Available from: https://journals.aom.org/doi/abs/10.5465/amr.1996.9602161568 [Accessed 24 Apr 2020].
MAKUCH, E., 2015. GTA 5 Ships 54 Million Copies, as Take-Two Revenue Rises 142 Percent. *GameSpot* [online]. Available from: http://www.gamespot.com/articles/gta-5-ships-54-million-copies-as-take-two-revenue-/1100-6429631/ [Accessed 14 Dec 2015].
MARCHAND, A., 2016. The power of an installed base to combat lifecycle decline: The case of video games. *International Journal of Research in Marketing*. 33 (1), pp. 140–154.
MARCHAND, A. and HENNIG-THURAU, T., 2013. Value Creation in the Video Game Industry: Industry Economics, Consumer Benefits, and Research Opportunities. *Journal of Interactive Marketing*. 27 (3), pp. 141–157.
MARTIN, C.B. and DEUZE, M., 2009. The Independent Production of Culture: A Digital Games Case Study. *Games and Culture*. 4 (3), pp. 276–295.
MÄYRÄ, F., 2008. *An Introduction to Game Studies*. SAGE Publications.
MCCLELLAND, D., 2015. How a BBC Micro shaped the course of GeekDad's life (Wired UK). *Wired UK* [online]. Available from: http://www.wired.co.uk/news/archive/2011-03/18/bbc-micro [Accessed 31 Dec 2015].
MCDONALD, S., GAN, B.C., FRASER, S.S., OKE, A., and ANDERSON, A.R., 2015. A review of research methods in entrepreneurship 1985-2013. *International Journal of Entrepreneurial Behavior & Research*. 21 (3), pp. 291–315.
MCMULLEN, J.S. and DIMOV, D., 2013. Time and the Entrepreneurial Journey: The Problems and Promise of Studying Entrepreneurship as a Process. *Journal of Management Studies*. 50 (8), pp. 1481–1512.
MELCER, E., NGUYEN, T.-H.D., CHEN, Z., CANOSSA, A., EL-NASR, M.S., and ISBISTER, K., 2015. Games Research Today: Analyzing the Academic

Landscape 2000-2014. In: *network* [online]. p. 20. Available from: http://www.researchgate.net/profile/Edward_Melcer/publication/278678569_Games_Research_Today_Analyzing_the_Academic_Landscape_2000-2014/links/558323b108aefa35fe30b668.pdf [Accessed 2 Dec 2015].
MERLEAU-PONTY, M., 1962. *Phenomenology of Perception*. Routledge London.
MILES, M.B. and HUBERMAN, A.M., 1994. *Qualitative Data Analysis: An Expanded Sourcebook*. Second Edition edition. Thousand Oaks: SAGE Publications, Inc.
MISHRA, C.S. and ZACHARY, R.K., 2014. *The Theory of Entrepreneurship* [online]. New York: Palgrave Macmillan US. Available from: http://link.springer.com/10.1057/9781137371461 [Accessed 16 Mar 2020].
MOLLICK, E.R., 2015. *Delivery Rates on Kickstarter* [online]. Rochester, NY: Social Science Research Network. SSRN Scholarly Paper No. ID 2699251. Available from: http://papers.ssrn.com/abstract=2699251 [Accessed 27 Dec 2015].
MORAN, D., 1999. *Introduction to Phenomenology*. 1 edition. London ; New York: Routledge.
MORRIS, M.H., 2015. Entrepreneurship as Experience. In: *Wiley Encyclopedia of Management* [online]. American Cancer Society. pp. 1–6. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1002/9781118785317.weom030039 [Accessed 24 Nov 2020].
MORSE, J.M., 1994. Designing funded qualitative studies. *Handbook in qualitative research, London: Sage*.
MOULY, V.S. and SANKARAN, J.K., 2004. Survival and Failure of Small Businesses Arising Through Government Privatization: Insights from Two New Zealand Firms*. *Journal of Management Studies*. 41 (8), pp. 1435–1467.
MURRAY, J.H., 1997. *Hamlet on the holodeck: The future of narrative in cyberspace (2001 ed.)*. Cambridge, Mass: The MIT Press.
NEWMAN, J., 2004. *Videogames*. London; New York: Routledge.
NEWMAN, J., 2013. *Videogames*. Routledge.
NEWMAN, M.Z., 2011. *Indie: an American film culture*. New York: Columbia University Press.
NEWZOO, 2016. Top 25 Companies 2015 by Game Revenues Up 14%. *Newzoo*. Blog [online]. Available from: https://newzoo.com/insights/articles/game-revenues-top-25-public-companies-14-2015/ [Accessed 11 Sep 2019].
NPD GROUP, 2010. *PC Full Game Digital downloads surpass retail unit sales* [online]. [online]. Available from: https://www.npd.com/wps/portal/npd/us/news/press-releases/pr_100920/ [Accessed 19 Mar 2019].
OED Online, n.d. pervert, v. *OED Online* [online]. Available from: https://www.oed.com/view/Entry/141685 [Accessed 18 Jan 2020a].
OED Online, n.d. temporality, n. *OED Online* [online]. Available from: https://www.oed.com/view/Entry/198948 [Accessed 21 Jan 2020b].
PALEY, J., 2016. *Phenomenology as Qualitative Research: A Critical Analysis of Meaning Attribution*. 1 edition. London ; New York: Routledge.
PARFITT, B., 2010. OPINION: Retail vs Steam. *MCV UK* [online]. Available from: http://www.mcvuk.com/news/read/opinion-retail-vs-steam [Accessed 24 Dec 2015].

PARKER, F., 2013. Indie game studies year eleven. *DIGRA 2013-DeFragging Game Studies* [online]. Available from: http://courses.bloodedbythought.org/pplay/images/d/df/Parker,_Felan-Indie_Gaming.pdf [Accessed 27 Feb 2017].
PATTON, M.Q., 1990. *Qualitative evaluation and research methods, 2nd ed*. Thousand Oaks, CA, US: Sage Publications, Inc.
PATTON, M.Q., 2002. *Qualitative research and evaluation methods 3rd ed.* 3 ed. Thousand Oaks, Calif: Sage Publications.
PERRY, D. and DEMARIA, R., 2009. *David Perry on Game Design: A Brainstorming Toolbox*. Charles River Media.
PHILLIPS, E.M. and PUGH, D.S., 2012. *How to get a PhD: a handbook for students and their supervisors*. 5. ed., repr. Maidenhead: Open Univ. Press.
PHILLIPS, T., 2015. "Don't clone my indie game, bro": Informal cultures of videogame regulation in the independent sector. *Cultural Trends*. 24 (2), pp. 143–153.
PIETKIEWICZ, I. and SMITH, J., 2014. *A practical guide to using Interpretative Phenomenological Analysis in qualitative research psychology*.
PITCHER, J., 2013. Grand Theft Auto 5 smashes 7 Guinness World Records. *Polygon* [online]. Available from: http://www.polygon.com/2013/10/9/4819272/grand-theft-auto-5-smashes-7-guinness-world-records [Accessed 14 Dec 2015].
POLKINGHORNE, D.E., 1989. Phenomenological Research Methods. In: R.S. VALLE and S. HALLING, eds. *Existential-Phenomenological Perspectives in Psychology: Exploring the Breadth of Human Experience* [online]. Boston, MA: Springer US. pp. 41–60. Available from: https://doi.org/10.1007/978-1-4615-6989-3_3 [Accessed 30 Jan 2021].
POOLE, S., 2004. *Trigger Happy: Videogames and the Entertainment Revolution*. Arcade Publishing.
POPE, L., 2018. *Return of the Obra Dinn [Online]. PC*. 3909.
VAN PRAAG, C.M., 1999. Some Classic Views on Entrepreneurship. *De Economist*. 147 (3), p. 26.
PRANDELLI, E., PASQUINI, M., and VERONA, G., 2016. In user's shoes: An experimental design on the role of perspective taking in discovering entrepreneurial opportunities. *Journal of Business Venturing*. 31 (3), pp. 287–301.
PRENSKY, M., 2001. *Digital game-based learning*. New York: McGraw-Hill.
RAMOGLOU, E. and TSANG, E.W.K., 2020. 'Who is an entrepreneur?' is (still) the wrong question. *Journal of Business Venturing Insights* [online]. Available from: https://eprints.soton.ac.uk/439391/ [Accessed 4 May 2020].
RATAN, R.A., TAYLOR, N., HOGAN, J., KENNEDY, T., and WILLIAMS, D., 2015. Stand by Your Man: An Examination of Gender Disparity in League of Legends. *Games and Culture*. 10 (5), pp. 438–462.
REHMAN, S. and AZAM ROOMI, M., 2012. Gender and work-life balance: a phenomenological study of women entrepreneurs in Pakistan. *Journal of Small Business and Enterprise Development*. 19 (2), pp. 209–228.
RENSE, S., 2019. Like Your Freshman Year Roommate, Apple's Pumping a Sh*t Ton of Money into Video Games. *Esquire* [online]. Available from: https://www.esquire.com/lifestyle/a27148709/apple-arcade-video-game-money/ [Accessed 8 Jan 2021].

REUNANEN, M. and SILVAST, A., 2009. Demoscene Platforms: A Case Study on the Adoption of Home Computers. In: J. IMPAGLIAZZO, T. JÄRVI and P. PAJU, eds. *History of Nordic Computing 2*. Berlin, Heidelberg: Springer. pp. 289–301.

REYMEN, I.M.M.J., ANDRIES, P., BERENDS, H., MAUER, R., STEPHAN, U., and BURG, E. van, 2015. Understanding Dynamics of Strategic Decision Making in Venture Creation: A Process Study of Effectuation and Causation. *Strategic Entrepreneurship Journal*. 9 (4), pp. 351–379.

REYNOLDS, P., 2020. *Global Entrepreneurship Monitor [GEM] Adult Population Survey Data Sets: 1998-2017: Codebook and Data Set Description* [online]. Available from: https://www.researchgate.net/publication/340418576_Global_Entrepreneurship_Monitor_GEM_Adult_Population_Survey_Data_Sets_1998-2017_Codebook_and_Data_Set_Description.

REYNOLDS, P., BOSMA, N., AUTIO, E., HUNT, S., DE BONO, N., SERVAIS, I., LOPEZ-GARCIA, P., and CHIN, N., 2005. Global Entrepreneurship Monitor: Data Collection Design and Implementation 1998-2003. *Small Business Economics*. 24 (3), pp. 205–231.

REYNOLDS, P. and MILLER, B., 1992. New firm gestation: Conception, birth, and implications for research. *Journal of Business Venturing*. 7 (5), pp. 405–417.

REYNOLDS, P.D. and CURTIN, R., 2004. Examples of Analysis: Work File Preparation, Comparisons, and Adjustment of Weights. In: *The Handbook of Entrepreneurial Dynamics: The Process of Business Creation, Thousand Oaks, CA: Sage Publications*. pp. 495–540.

REYNOLDS, P.D. and CURTIN, R.T., 2008. Business creation in the United States: Panel study of entrepreneurial dynamics II initial assessment. *Foundations and Trends® in Entrepreneurship*. 4 (3), pp. 155–307.

REYNOLDS, P.D. and WHITE, S.B., 1992. Finding the nascent entrepreneur: Network sampling and entrepreneurship gestation. In: N.C. CHURCHILL, S. BIRLEY, W.D. BYGRAVE and C. WAHLBIN, eds. *W.E.J.* Wellesley, MA: Babson College. pp. 199–208.

RIGNALL, J., 2016. Top 10 Highest-Grossing Arcade Games of All Time. *USgamer*. Blog [online]. 1 January. Available from: https://www.usgamer.net/articles/top-10-biggest-grossing-arcade-games-of-all-time [Accessed 11 Sep 2019].

ROBERTS, J., 2017. *Gorogoa [Online]. PC*. Annapurna Interactive.

ROBINSON, O.C., 2014. Sampling in Interview-Based Qualitative Research: A Theoretical and Practical Guide. *Qualitative Research in Psychology*. 11 (1), pp. 25–41.

ROBSON, C., 2002. *Real World Research: A Resource for Social Scientists and Practitioner-researchers*. 2nd Edition edition. Oxford, UK ; Madden, Mass: John Wiley & Sons.

ROCKSTAR NORTH, 2013. *Grand Theft Auto V [Online]. PC*. Rockstar Games.

ROJON, C. and SAUNDERS, M.N., 2012. Formulating a convincing rationale for a research study. *Coaching: An International Journal of Theory, Research and Practice*. 5 (1), pp. 55–61.

RONSTADT, R.C., 1984. *Entrepreneurship; Text, Cases and Notes*.

ROTEFOSS, B. and KOLVEREID, L., 2005. Aspiring, nascent and fledgling entrepreneurs: an investigation of the business start-up process. *Entrepreneurship & Regional Development*. 17 (2), pp. 109–127.

RUBIN, H.J. and RUBIN, I., 2005. *Qualitative Interviewing: The Art of Hearing Data*. SAGE.
RUFFINO, P., 2020. *Independent Videogames: Cultures, Networks, Techniques and Politics* [online]. Milton, UNITED KINGDOM: Taylor & Francis Group. Available from: http://ebookcentral.proquest.com/lib/salford/detail.action?docID=6295925 [Accessed 14 Jan 2021].
RUTTER, J. and BRYCE, J., eds., 2006. *Understanding digital games*. London ; Thousand Oaks: Sage Publications.
SACCO, D., 2014. 92% of PC game sales are digital. *MCV* [online]. Available from: https://www.mcvuk.com/business/92-of-pc-game-sales-are-digital [Accessed 19 Mar 2019].
SAUNDERS, M., LEWIS, P., and THORNHILL, A., 2009. *Research methods for business students*. 5th ed. New York: Prentice Hall.
SAUNDERS, M.N.K., 2012. Choosing Research Participants. In: *Qualitative organizational research: core methods and current challenges*. pp. 35–52.
SAUNDERS, M.N.K., LEWIS, P., and THORNHILL, A., 2015. *Research Methods for Business Students*. 7th ed. Pearson Higher Ed.
SENIOR, V., SMITH, J.A., MICHIE, S., and MARTEAU, T.M., 2002. Making Sense of Risk: An Interpretative Phenomenological Analysis of Vulnerability to Heart Disease. *Journal of Health Psychology*. 7 (2), pp. 157–168.
SEYMOUR, R.G., 2006. Hermeneutic phenomenology and international entrepreneurship research. *Journal of International Entrepreneurship*. 4 (4), pp. 137–155.
SHANE, S., 2012. Reflections on the 2010 AMR Decade Award: Delivering on the Promise of Entrepreneurship As a Field of Research. *Academy of Management Review*. 37 (1), pp. 10–20.
SHAPERO, A., 1984. The entrepreneurial event. In: C.A. KENT, ed. *The environment for entrepreneurship*. Lexington, Mass.: Lexington Books.
SHAPERO, A. and SOKOL, L., 1982. The social dimensions of entrepreneurship. In: C.A. KENT, D.L. SEXTON and K.H. VESPER, eds. *Encyclopedia of entrepreneurship*. Englewood Cliffs, Prentice Hall, NJ. pp. 72–90.
SHEFF, D., 1993. *Game over: How Nintendo conquered the world*. Vintage.
SHOOK, C.L., PRIEM, R.L., and MCGEE, J.E., 2003. Venture Creation and the Enterprising Individual: A Review and Synthesis. *Journal of Management*. 29 (3), pp. 379–399.
SILVAST, A. and REUNANEN, M., 2014. Multiple Users, Diverse Users: Appropriation of Personal Computers by Demoscene Hackers. In: G. ALBERTS and R. OLDENZIEL, eds. *Hacking Europe: From Computer Cultures to Demoscenes* [online]. London: Springer. pp. 151–163. Available from: https://doi.org/10.1007/978-1-4471-5493-8_7 [Accessed 22 Sep 2021].
SILVERMAN, D., 2004. *Qualitative Research: Theory, Method and Practice*. SAGE.
SMITH, J.A. and EATOUGH, V., 2006. Interpretative phenomenological analysis. In: G.M. BREAKWELL, S. HAMMOND, C. FIFE-SCHAN and J.A. SMITH, eds. *Research Methods in Psychology*. London: SAGE Publications.
SMITH, J.A. and EATOUGH, V., 2012. Interpretative Phenomenological Analysis. In: G. BREAKWELL, J.A. SMITH and D.B. WRIGHT, eds. *Research Methods in Psychology*. London: SAGE Publications Ltd.

SMITH, J.A., FLOWERS, P., and LARKIN, M., 2009. *Interpretative phenomenological analysis: theory, method and research*.
SMITH, J.A., JARMAN, N., and OSBORN, M., 1999. Doing interpretative phenomenological analysis. In: M. MURRAY and K. CHAMBERLAIN, eds. *Qualitative Health Psychology*. London: SAGE Publications.
SMITH, J.A. and OSBORN, M., 2003. Interpretative phenomenological analysis. In: *Qualitative psychology: A practical guide to research methods*. Thousand Oaks, CA, US: Sage Publications, Inc. pp. ix, 258.
SMITH, J.A. and OSBORN, M., 2008. Interpretative phenomenological analysis. In: *Qualitative Psychology: A practical guide to research methods*. London: SAGE Publications.
STAKE, R.E., 1995. *The Art of Case Study Research*. SAGE.
STARGAME, A., 2018. AAA games improve graphics, indie developers think over gameplay. *Medium* [online]. Available from: https://medium.com/@alexstargame/aaa-games-improve-graphics-indie-developers-think-over-gameplay-245e622165ad [Accessed 2 Jul 2019].
STARKS, H. and BROWN TRINIDAD, S., 2007. Choose Your Method: A Comparison of Phenomenology, Discourse Analysis, and Grounded Theory. *Qualitative Health Research*. 17 (10), pp. 1372–1380.
STATT, N., 2015. Playing games on the PC is making a comeback. *CNET* [online]. Available from: http://www.cnet.com/news/playing-games-on-the-pc-is-making-a-comeback/ [Accessed 15 Dec 2015].
STEPHAN, U., HART, M., and DREWS, C., 2015. Understanding Motivations for Entrepreneurship. p. 54.
STRATEGY FIRST, 2006. *Strategy First to Deliver Multiple Titles On-Line via Steam* [online]. [online]. Available from: https://web.archive.org/web/20060328053420/http://www.strategyfirst.com/press/DisplayArticle.asp?sLanguageCode=EN&iArticleID=3250 [Accessed 31 Jan 2021].
SULLIVAN, M., 2013. The Harsh Reality of Indie Game Success. *IGN* [online]. Available from: https://uk.ign.com/articles/2013/07/23/the-harsh-reality-of-indie-game-success [Accessed 12 Oct 2020].
SYMON, G. and CASSELL, C., eds., 2012. *Qualitative organizational research: core methods and current challenges*. 1. publ. Los Angeles, Calif.: Sage.
TAITO, 1978. *Space Invaders [Arcade Cabinet]*. Taito.
TAKAHASHI, D., 2002. *Opening the Xbox: Inside Microsoft's Plan to Unleash an Entertainment Revolution*. Rocklin, CA, USA: Prima Communications, Inc.
TAYLOR, T.L., 2006. *Play between worlds: exploring online game culture*. Cambridge, Mass: MIT Press.
THIER, D., 2014. 'Grand Theft Auto 5' Has Sold Nearly $2 Billion. *Forbes* [online]. Available from: http://www.forbes.com/sites/davidthier/2014/05/13/grand-theft-auto-5-has-sold-nearly-2-billion-at-retail/.
THOMPSON, C., 2008. Explosion of Indie Games Kills 'Best of' Column. *Wired* [online]. Available from: https://www.wired.com/2008/01/explosion-of-indie-games-kills-best-of-column/ [Accessed 20 Jan 2020].
THOMPSON, C.J., LOCANDER, W.B., and POLLIO, H.R., 1989. Putting Consumer Experience Back into Consumer Research: The Philosophy and Method of Existential-Phenomenology. *Journal of Consumer Research*. 16 (2), p. 133.

THURIK, R. and WENNEKERS, S., 2004. Entrepreneurship, small business and economic growth. *Journal of Small Business and Enterprise Development*. 11 (1), pp. 140–149.
TUAZON, G., BELLAVITIS, C., and FILATOTCHEV, I., 2018. Nascent Entrepreneurship: Current Research Directions and Controversies. p. 47.
VALVE CORPORATION, 2000. *Counter-Strike [Online]. PC*. Valve Corporation.
VALVE CORPORATION, 2021. *Steam - 2020 Year in Review* [online]. [online]. Available from: https://store.steampowered.com/news/group/4145017/view/2961646623386540826 [Accessed 28 Jan 2021].
VAN MANEN, M., 1990. *Researching lived experience: Human science for an action sensitive pedagogy*. Routledge.
VEASEY, J., 2003. GameFAQs: General Message List. Blog [online]. 3 June. Available from: https://web.archive.org/web/20041012074034/http://chris.insder.com/index.php?pg=224 [Accessed 31 Jan 2021].
VOGEL, P., 2017. From Venture Idea to Venture Opportunity: *Entrepreneurship Theory and Practice* [online]. Available from: https://journals.sagepub.com/doi/10.1111/etap.12234 [Accessed 12 Oct 2020].
WADE, A., 2016. *Playback - A Genealogy of 1980s British Videogames*. New York: Continnuum-3PL.
WAGNER, J., 2006. Nascent Entrepreneurs. In: S. PARKER, ed. *The Life Cycle of Entrepreneurial Ventures* [online]. Boston, MA: Springer US. pp. 15–37. Available from: http://link.springer.com/10.1007/978-0-387-32313-8_2 [Accessed 25 Mar 2020].
WAGSTAFF, C., JEONG, H., NOLAN, M., WILSON, T., TWEEDLIE, J., PHILLIPS, E., SENU, H., and HOLLAND, F., 2014. The Accordion and the Deep Bowl of Spaghetti: Eight Researchers' Experiences of Using IPA as a Methodology. p. 16.
WALKER, P., 2014. Early Access popularity growing, but only 25% have released as a full game. *GamesIndustry.biz* [online]. Available from: https://www.gamesindustry.biz/articles/2014-11-13-early-access-popularity-growing-but-only-25-percent-have-released-as-a-full-game [Accessed 11 Sep 2019].
WEBSTER, A., 2011. Xbox Live Indie Games: no way to make a living. *Ars Technica* [online]. Available from: https://arstechnica.com/gaming/news/2011/07/xblig-feature.ars.
WHITSON, J.R., SIMON, B., and PARKER, F., 2018. The Missing Producer: Rethinking indie cultural production in terms of entrepreneurship, relational labour, and sustainability. *European Journal of Cultural Studies*. p. 1367549418810082.
WILLIAMS, D., 2002. Structure and competition in the U.S. home video game industry. *International Journal on Media Management*. 4 (1), pp. 41–54.
WILLIAMS, D., 2014. *The History and Structure of the Video Game Industry – Structure, Development to Publishing - Part 4* [online]. [online]. Available from: http://www.ninjametrics.com/blog/the-history-and-structure-of-the-video-game-industry-structure-development-to-publishing-part-4 [Accessed 12 Oct 2020].

WOLF, M.J.P. and PERRON, B., eds., 2003. *The video game theory reader*. New York ; London: Routledge.
YANOW, D., 2004. Translating Local Knowledge at Organizational Peripheries *. *British Journal of Management*. 15 (S1), pp. 9–25.
YIN-POOLE, W., 2011. Where does my money go? *Eurogamer.net* [online]. Available from: http://www.eurogamer.net/articles/2011-01-10-where-does-my-money-go-article [Accessed 24 Dec 2015].
YIN-POOLE, W., 2013. Sega sues bankrupt THQ for £630k over Company of Heroes 2 Steam pre-orders. *Eurogamer.net* [online]. Available from: http://www.eurogamer.net/articles/2013-07-10-sega-sues-bankrupt-thq-for-630k-over-company-of-heroes-2-pre-orders [Accessed 24 Dec 2015].
ZACKARIASSON, P. and WILSON, T.L., eds., 2012. *The video game industry: formation, present state, and future*. 1st ed. New York: Routledge.

Appendix 1: Videogames and the indie

Academic research on the videogames industry

There are many reasons why academic study of videogame development in the games industry is conducted, particularly given that it occurs against a backdrop of an economy that is increasingly digital and one where the creative industries contribute £84 billion to the UK economy annually (Department for Culture, Media and Sport, 2016). Yet there are also arguments to study videogames that go beyond the financial value of the industry:

> *Debates continue over the… social consequences of gaming, whether they relate to education, antisocial behaviour, gender or exposure of minors to harmful content, [videogames] continue to be the site of much interest for academics, policy makers and game developers. As such, even if one does not engage with digital games, it is difficult not to be aware of their importance as a contemporary cultural phenomenon. The manner in which digital games stand at a node of such a wide range of cultural, technological, political, aesthetic and economic forces is one reason why they have increasingly been the focus of academic research and analysis. (Rutter and Bryce, 2006: xiii)*

It is possible to identify disciplines and thematic areas where most work in the field of games studies has been concentrated, which also serves to reinforce the notion that there is a clear gap for new insight in the area of videogames, business and entrepreneurship – especially outside of global, mainstream AAA production. Table 11 below indicates common areas of videogames research and provides examples of key texts in these areas.

Growth in the academic literature on videogames has not focused on the industry (Kerr, 2006, 2017, Zackariasson and Wilson, 2012, Marchand and Hennig-Thurau, 2013, Melcer et al., 2015, Marchand, 2016), yet the evolution of game studies over the past twenty years has fuelled much academic enquiry in other areas (e.g. psychology, narratology/ludology, media effects, violence, education, learning, literacy and more – see Table 1 for illustrative texts). Nevertheless, whilst videogame sales have continued to increase (Dring, 2015), academic research on the business of videogames, in particular entrepreneurship, has not paralleled this growth. Nor has there been development of specific models or frameworks to account for the emergence of indie development within the industry, or for the nuances

of the industry itself. Thus despite this increasing focus on videogames from academics, there remains a distinct lack of research in the area of entrepreneurship. Melcer et al. (2015) analysed the academic landscape of games research over the previous 15 years to identify the variety of videogames research by topic area. Despite a wide range of topics identified (e.g. game design, user experience, gamification, social media, education, ludology, gender and many more), business and the industry itself are conspicuous by their absence. However, seminal work by Kerr (2006) in the area of videogames and business has been revisited more recently (2017), expanded and updated in a global context with regards to production, circulation and policy (see below). However, her contributions to academic discourse on the videogames industry are exceptions rather than the norm.

Table 11: Broad groupings of academic research on videogames

Grouping	Example existing research
Culture, psychology, narrative/play	(Murray, 1997, Aarseth, 2001, 2015, Wolf and Perron, 2003, Mäyrä, 2008, Juul, 2010, Newman, 2013, Melcer et al., 2015)
Media effects, violence	(Rutter and Bryce, 2006, Anderson, Gentile and Buckley, 2007, Gunter, 2016)
Education, learning, literacy	(Prensky, 2001, De Aguilera and Mendiz, 2003, Gee, 2004, Dormann, Whitson and Neuvians, 2013)
Gender, representation of women	(Colwell and Payne, 2000, Guernsey, 2001, Bryce and Rutter, 2003, Krotoski, 2004, Crawford and Gosling, 2005, Hand and Moore, 2006, Taylor, 2006, Ratan, Taylor, Hogan, Kennedy and Williams, 2015)
Design, technology	(Bartle, 2004, Koster, 2005, Perry and DeMaria, 2009, Fullerton, 2014, Friedman, 2015)

Whilst there are texts on the history of the videogames industry, there is less research specifically on management, business or finance with regards to videogames or the industry as a whole (Marchand and Hennig-Thurau, 2013, Marchand, 2016). Indeed, Zackariasson and Wilson (2012: 1) note that 'this industry has attracted surprisingly little attention from researchers of business and economics.' Some texts offer insights into specific companies such as Atari, Nintendo or Microsoft (Cohen, 1984, Sheff, 1993, Takahashi, 2002) and others of the industry as a whole (e.g. Herz, 1997, Poole, 2004). However, as noted by Kerr (2006, 2017), both types serve more as reference material than academic analysis of the industry, methods of production, distribution and similar. Kerr

(2017) does however address this issue in her key text on the global games industry, with a focus fixed upon the main players, AAA studios, global corporations and the interrelationships between them. However, the text focuses not upon indies, but on global players. Perhaps such a lack of focus on indies is due to the difficulty of defining 'the indie' (see section 2.2.2), but as this is not stipulated, this is mere speculation. Nevertheless, such exploration of global corporations and AAA development remains tangential to the focus of this study, insofar as they are not the focus of the individual nascent entrepreneurial experience. Nevertheless, Kerr (2006, 2017), does also provide an insight into a wide number of topics within the videogames industry, including vertical integration, the production cycle and the boxed product value chain. However, beyond her texts, Zackariasson & Wilson's (2012) claims are justified insofar as whilst there are texts on the videogames industry, they are few in number, often outdated and do not comprehensively cover all aspects of the industry – in particular the area this study explores.

The videogames industry

Despite the dearth of academic studies on entrepreneurship within the videogames industry, there is nonetheless a need to provide a clear understanding of videogames and 'indie' as well as exploring the industry within which they are involved. It is perhaps therefore most useful to first examine the industry generally prior to the individual indie developer, as this will provide an insight into the environment the indie inhabits. The videogames industry is huge and attempting to discuss it in its entirety does not serve a useful purpose for this study for two reasons. Firstly, indie has historically been oriented overwhelmingly (though not exclusively) towards the PC (Iuppa and Borst, 2012, Cobbett, 2017) as platform due to digital distribution (Caoili, 2012), rather than videogame consoles such as those manufactured by Sony, Microsoft and Nintendo, where costs can be prohibitive to launch and support games, such as $10,000 to fix bugs with a patch update (Hruska, 2013). The barriers to entry are significantly lower for PC with likely higher gains than consoles (Webster, 2011). It is therefore logical they focus on PC over other formats and platforms. Secondly, according to DFC Intelligence (in Sacco, 2014), 92% of PC games sold globally are via digital download. This contrasts sharply with the videogame console market, where in the UK only 28% were sold digitally during the same period (Houghton, 2014).

It is therefore useful to provide a brief historical overview of the PC games industry that leads to the present, as well as to explain the different kinds of basic development studio

approaches (first-party, third-party etc.). This is valuable for many reasons, not least in order to understand and situate indie game development within the larger industry. In addition, being able to compare and, perhaps more importantly, contrast indie with different and larger studios helps to clarify the concept of the indie developer. Furthermore, without a degree of clarity regarding the development of the PC videogames industry at a macro level, it is more difficult to make sense, generate meaning and interpret the experience of the participants of this study. Finally, in order to clearly demonstrate the need to conduct academic work on this industry, it is helpful to have at least a rudimentary awareness of the industry at present and the developments which have led us to this point.

History

Although it may be useful to provide a discourse on the history of the videogames industry as a whole in order to assess and better understand the specific aspects this study focuses upon, it would be outside the scope of this work to undertake such a vast and wide-ranging historical review. Therefore, this section attempts to coalesce into focus the most pertinent areas to introduce and clarify the position of the indie videogame developer, from the perspective of the UK.

The home computer as a videogame platform

Whilst some of the earliest computer-based videogames originated in university laboratories in the 1950s and 1960s, it was arguably not until the early 1980s that a significant volume of consumers utilised home computers to play videogames. In 1981, whilst the home console market lurched towards the 'videogame crash of 1983' (Cohen, 1984, Herz, 1997, Atari: Game Over, 2014), Commodore Business Machines launched the VIC-20 home computer, which went on to sell over 2.5m units, and later followed up with the Commodore 64 (C64). Introduced in 1982, the C64 went on to be the biggest selling computer of all time (Griggs, 2011) with unit sales estimates ranging between 12m and 22m. Around the same time in the UK, a number of other computers were also launched that provided a viable platform for the videogame consumer, including the Amstrad CPC series which sold over 3m units and the Sinclair ZX Spectrum and Acorn BBC Micro, each selling over 1.5m units (Amstrad Limited, 2015, McClelland, 2015).

Along with home computer hardware success, the 1980s were also a period of notable achievement (and arguably celebrity) for individual 'bedroom coders' who were capable of creating videogames alone and in isolation from a wider industry. Such individuals and their endeavours have some similarities to the contemporary concept of the indie. Indeed, there

are many stories of young individuals becoming critically and/or financially successful during this period (see Wade, 2016).

In the late 1980s and early 1990s, in Europe and the UK home computers for digital games included the popular Atari ST and Commodore Amiga computers (intric8, 2016, Knight, 2018). However, despite them both cultivating significant fan-bases, by the mid-1990s they were beginning to be eclipsed in terms of videogames performance by the PC - IBM PC clones began to dominate the personal computer market. The launch of Windows 95 simplified PC gaming and the presence of dedicated graphics accelerators from ATI and NVidia led to significantly improved visual fidelity and 3D graphics that outperformed all other contenders (Farrimond, 2011a, 2011b).

Online gaming, digital distribution, crowdfunding and subscription

Advances in visual fidelity were also being matched by advances in Internet connectivity (Donovan, 2010). By 2000, Internet connectivity had advanced further to allow PC gamers to compete online against others in real-time 'twitch' games, such as *Counter-Strike* (Valve Corporation, 2000), a forerunner to current popular titles such as the *Call of Duty* (Infinity Ward, 2003) series. Furthermore, by this time both consumers and developers were utilising direct one-to-many communication channels (such as IRC, forums and websites), building communities for niche products and illustrating a level of interaction that was previously unimaginable (see Veasey (2003) for an example of CNET's purchase of *GameFAQs* for US$2.2 million).

By the mid-2000s, online gaming had become commonplace, with massively multiplayer games such as *World of Warcraft* (Blizzard Entertainment, 2004) being depicted in mainstream media and played online by millions (Advent Development, 2020). In addition, it was now also possible to purchase and download games directly from several online web stores without the need to purchase a physical product by visiting a 'bricks and mortar' retailer (Strategy First, 2006). Significantly, in 2005 the videogame development studio *Valve* launched a third-party game for the first time via their own online store *Steam*[9], and PC digital distribution began its journey of ascension over physical retail (see Kelly, Klézl, Israilidis, Malone and Butler, 2020, for further details). Over the subsequent years, the

[9] *Steam* (https://store.steampowered.com) is an online videogames portal, digital distribution service and community for releasing, purchasing and discussing videogames and is owned by Valve Corporation. Launched in 2003 and publishing others' games since 2005, *Steam* is considered by many the most important online storefront for PC videogames. In 2017 it generated $4.3 billion in revenue (Bailey, 2018). In the year 2020 alone, there were over 10,000 software releases on *Steam* (Galyonkin, 2021) and there were 24.8 million concurrent users at peak (Valve Corporation, 2021).

popularity and success of *Steam* as an online retailer became phenomenally significant, with it ultimately becoming the de facto retailer for PC videogames online during that era. It was claimed that 'If you're not on *Steam*, then you're not an indie game developer of any note' (Morris, cited in Elliot, 2010). To further clarify, in mid-2005 *Valve* had not published or sold a single third-party title via *Steam*. Yet less than a decade later, Steam accounted for 75% of the entire PC digital download market (Statt, 2015).

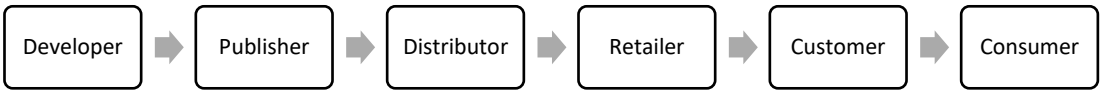
By 2010, PC digital game downloads were the norm and increasingly outsold physical units (NPD Group, 2010). By 2014, PC digital hardware revenue had doubled that of consoles (Jon Peddie Research, 2014) and PC digital games also began to outsell console games (DFC Intelligence, cited in Sacco, 2014). During this same period, there were parallel developments in how games were being funded, with consumer/developer interaction increasing. In 2010 Kickstarter began operating, with consumers helping to determine which videogame pitches were funded and thus further developed. Similarly, *Valve's* Early Access program via *Steam* began in 2013 and allowed developers to acquire revenue from consumers during development of their product, in exchange for consumer access to early beta versions of their games. Such opportunities for developers to circumvent the traditional route to market of needing a boxed-product publisher were unprecedented on this scale and allowed developers to gain access to both funding and a burgeoning community of potential customers. Prior to digital distribution, if an independent developer wanted to distribute their one-time purchase product, they would need the help of a publisher. As such, games generally adopted a linear production process; value being created upstream by developers and consumed downstream by customers, as Kerr (2006; 66) noted:

> *The production cycle can also be conceptualised as a value chain, whereby at each stage of the production cycle companies add value to the core product and contribute to the final price paid by the consumer. Kerr (2006; 66)*

The traditional boxed product value chain can be seen below in Figure 9. This process made it extremely difficult for indies to reach retail shelves without the backing of a major publisher. However, even if the developers funded their own project (in an attempt to remain free of publisher interference on content), they would still need to find a publisher to manage distribution and retail. Although there is variation in estimates of the proportion of the sale that a developer receives from retail sales, many sources claim the publisher

receives around 30-45% of the retail price (Parfitt, 2010, Yin-Poole, 2011), with the developer thus receiving a lower proportion, perhaps as low as 10% (Edwards, 2006). By comparison, according to several sources (Parfitt, 2010, Francis, 2012, Yin-Poole, 2013), digital distribution via *Steam* is likely to return around 70% of the retail price to the developer - a significant difference.

Figure 9: Traditional value chain in the video game industry
(Zackariasson and Wilson, 2012)



During the 2010s, many solo developer, low-budget games became high-profile success stories and appeared to demonstrate that crowdfunding and digital distribution, along with an entrepreneurial mindset could enable budding developers to 'go indie' and begin their own NVC process. However, crowdfunding was not necessarily the panacea for indie development that it may have been heralded as during this period. According to industry reports and analysis (Walker, 2014, Galyonkin, 2015a), and *Valve* themselves (Handrahan, 2014), a significant number of crowdfunded videogame projects failed or never launched during this period. On Kickstarter, around two thirds of 'gaming' projects did not successfully reach their funding goals: 6,995 successful versus 14,216 unsuccessful at the end of 2015 for example (Kickstarter, 2015). Furthermore, there were estimates that around 12% of those that did reach their funding goals still failed to launch (Mollick, 2015). *Steam's* Early Access program, allowing consumers to purchase and thus fund titles still in development appeared to show similar rates of failure. 18-24 months after launching, only 20-25% of titles had moved from Early Access to a full launch (Walker, 2014, Galyonkin, 2015b).

As the decade progressed, competitor platforms emerged to *Steam* from major publishers such as *Epic's Game Store*, Ubisoft (*UPlay*) and Electronic Arts (*EA Access*). This trend also introduced consumers to a new digital subscription-based business model, with EA even providing its own service via *Steam* and Microsoft's *Xbox Game Pass* platforms in 2020 and 2021 (*EA Play*), indicating a significant reshaping of the online retail space. This subscription approach proliferated in the late 2010s; Apple *Arcade* dominated the mobile games subscription market and Microsoft's *Xbox Game Pass* integrates console and PC game platforms into a subscription behemoth for consumers to enjoy large collections of

existing as well as new and exclusive content. As such, since the later part of the 2010s and into the 2020s, this merging of digital distribution and subscription business model offers much potential to the indie developer - as the platform holders seek additional content for their subscribers, they look to identify and financially support the development of new and original games (Rense, 2019, Gartenberg, 2020).

Structure

As has been discussed above, in the past decade an era of significant digital distribution of videogames across the industry as a whole has occurred, especially those utilising PC as platform. Whilst this research focuses on indies as opposed to the industry generally, understanding where indies fit in with the other AAA developers and publishers is nevertheless important. This is because without an appreciation of the industry structure and the organisation of the studio approach, it is difficult to evaluate and comment upon what indie means, who those indies are, or their motivations and the challenges they face.

Kerr (2006) and Williams (2002) note that traditionally videogame development typically progresses through five vertical stages, notably: development, publishing, manufacturing, distribution and retail. It is worth noting here however, that although this study is focused on the developer and development (as opposed to other parties such as publisher, retailer) - because that is the likely point at which the nascent entrepreneur will be focused - that is not to say that some of these roles are not often combined. For example, indies may both develop and publish their own titles. Furthermore, a manufacturing process is often not required in the PC videogames industry (or the mobile industry for that matter), being as it is most often digitally distributed via online platforms. Nevertheless, manufacturing does form a significant stage of the process for a proportion of the industry (console titles in bricks and mortar shops for example).

Kerr (2017) also distils the industry into five segments regarding videogames software: i) console, ii) 'core' PC, iii) online client, iv) online application, and v) mobile. Console is perhaps the clearest distinction, comprising mainstream videogame console gaming, including handheld consoles. Mobile (phone and tablet) is also reasonably clear in its delineation from other segments. The other segments are perhaps less clear and require delineation via business model by Kerr (ibid). Core PC (and Apple Mac) is considered to compromise full-retail games which typically adopt a one-time purchase model. Online client intends to include games with larger development timelines, bigger companies and (typically) subscription-based approaches as business models. Differentiating further, is the

online applications segment, which is defined as typically freemium (free to play but with options to pay for additional content), where the market historically concentrated around businesses such as Facebook, Zynga and Tencent. It is 'core' PC, the second of these segments which this study focuses upon and which the entrepreneurial indie often inhabits. This 'core PC' segment is where innovation and experimentation frequently occur, as Kerr (2017) herself notes, 'Many significant small, independently developed games have emerged first as fully digitally downloadable PC games.'

Videogame developers

A videogame developer can refer to a single person, or a studio with hundreds of employees focusing on specific details and areas of development such as art, programming, audio etc. However, a number of academic sources (Williams, 2002, 2014, Kerr, 2006: 64, 2017: 14, Zackariasson and Wilson, 2012) refer to developers in the same manner as is used within the industry itself, crudely classified into one of three categories:

> *1) first-party developers or internal teams which are fully integrated into a publishing company;*
>
> *2) second-party developers who are contracted to create games from concepts developed by a publisher;*
>
> *3) third-party developers, or independent development houses, who develop their own projects and try to sell them to a publisher.*
>
> *(Kerr, 2006: 64)*

Whilst from 2006, these definitions were in use long prior and remain reasonably accurate and true nonetheless today with wide use throughout industry, albeit often with further delineation now with regards to third-party, which is the area this research focuses upon. The distinction between an 'independent studio' and an 'indie' is one that remains somewhat blurred; indeed in 2014 the high-profile industry *Develop* Conference closed with the debate '*What is an indie Anyway?*' Nevertheless, whilst strict definitions remain contentious and multifarious (see below as well as Gnade, 2010, Dutton, 2012, Lipkin, 2012, Parker, 2013, Phillips, 2015, Grabarczyk and Garda, 2016, Baker, 2018), typically indies are not owned nor dependent upon a publisher, with many self-publishing via digital distribution services (Kerr, 2017). The most distinguishing feature of the indie in terms of differentiating from first- and third-party development studios is often (but not always as we shall see further below) that they will be self-funding to a (variable, but often large)

degree (DellaFave, 2013, Sullivan, 2013, Gordon, 2019), but this is not the sole criteria. Whilst arguably they have the most creative control because they do not require sign-off from a publisher, they may still be beholden in some way to funders such as venture capitalists, crowd funders etc. Furthermore, a variety of development costs may limit the scale, scope or development period for indies too. Nevertheless, the process of production for a 3rd party developer often involves getting publishers to approve and fund their product and places them in a position of being influenced directly by those publishers in order to continue receiving funding – a key difference from a self-funding, financially independent indie.

Value

Whilst there are certainly many arguments around the 'value' of videogames as art and play (see Table 11 above), that is not necessarily the focus in this thesis. Undoubtedly the value of videogames is often brought forth in the context of other areas of social science, media (again, see Table 11 above) and indie videogame style, themes, concepts and aesthetics (Juul, 2019). However, it remains the case that the focus of this thesis is on the entrepreneur and the entrepreneurial experience as a journey to new venture creation. That is not to imply that only financial value is of any concern to this study or the participants, far from it, but that unless aesthetics (for example) is brought forth as an emergent area of discussion significant to the participants' nascent entrepreneurial experience, then it would not be the focus of this study.

Global scale and economic value

Sales revenues of videogames are economically significant and arguably have always been so. Whilst academic interest in digital games has developed significantly over the past 20 years (Aarseth, 2001, Melcer et al., 2015) the economic value and global scale of the industry has been significant for much longer. Whilst it is evident that companies such as Activision-Blizzard can generate annual revenue of around $5bn (Newzoo, 2016), such significant sums are not peculiar to just the developer/publishers behemoths of the past two decades; revenue for digital games has been substantial since the earliest days of the industry. Inflation adjusted revenue estimates for Taito's *Space Invaders* (Taito, 1978) range between $6bn and $13bn for just the period 1978 – 1982 (Hansen, 2016, Rignall, 2016). It is therefore pertinent more than ever for academics to address an industry of such economic scale, especially as it has received such little attention from academe given this economic significance (Zackariasson and Wilson, 2012).

Revenue is increasing and is greater than other entertainment industries. Videogames have always been of high value to the economy globally, and this has also been the case within the UK specifically. In 1999, combined digital game hardware and software sales in the UK was just under £1bn (Newman, 2004: 3). However, by 2014, software sales alone had more than doubled this figure, to £2.4bn, making it arguably the biggest entertainment industry in the UK: more than film (£2.1bn) and significantly more than music (£1bn). Furthermore, and perhaps more importantly, whilst both music and film sales showed a decline year on year, videogames saw a 7.5% increase (Dring, 2015), mirroring similar findings by Kerr (2006: 49–50) comparing videogame sales to US box office revenues and recorded music sales.

Individual videogames compete with and often supersede revenue generation of other media. 2013's highest grossing digital game, *Grand Theft Auto V* (Rockstar North, 2013), generated $800m in its first 24 hours (Goldfarb, 2013) and became the fastest entertainment property to gross $1 billion (Pitcher, 2013). It also became the highest-selling game of all time in the UK. Extrapolating from estimates by Thier (2014), with a global shipped volume of 54 million units by August 2015 (Makuch, 2015), it is not unreasonable to estimate this title alone generated in excess of $3bn in sales in its first 3 years and it continues to generate revenue through online multiplayer, expansions and downloadable content.

Videogames and indie

Section 2.2 provides a brief discussion of the few academic works evaluating the indie and acknowledges them as a small but important area for further academic interest. In addition, a discussion and working definition is provided noting the findings in chapter 5which highlight that it is not just the means, but also the *methods* of production that are paramount to the indies in this study. As such, it is possible here to further explore the history and evolution of indie-ness in more detail.

Around 2000, 'Designer X' (game designer Greg Costikyan) wrote "The Scratchware Manifesto" (Costikyan, 2000) and followed up with several articles in a series titled "Death to the games industry" (Costikyan, 2005). These essays called for a rejection of the overriding processes of videogame development and publishing. This was a call for a rejection of the mainstream processes and values and a return to the idea of play and 'pure' videogames: 'We will strive for innovation over imitation, originality over the tried and true' pronounced Costikyan (2000). He believed that developers were always beholden

to publishers and were never able to bring more innovative and original products to market, stating 'The only games that make it to the shelves are those on which publishers have advanced millions in development funding' (Costikyan, 2000). These essays began to propose use of the Internet to democratise game distribution. Whilst arguably nothing changed overnight, soon *Steam* and other digital distribution platforms gathered momentum and went some way to meeting some of Costikyan's (2000, 2005) demands, arguments and desires in the years that followed with – as previously highlighted – a significant increase in digital distribution. What arguably emerged from this era was a generation of developers that considered gameplay as important if not more so than graphics (Cornell, 2013, Stargame, 2018) in terms of 'innovation' and 'originality' (Costikyan, 2000).

This belief in the importance of innovation and originality in media did not reside solely with Costikyan however, and was present and much discussed elsewhere, such as the film industry for example. Here, what it means to be indie is discussed by Newman (2011: 3):

> *Calling a business independent also implies that if it is to succeed it must be more clever and innovative than more powerful competitors, like David facing Goliath, and innovation in any field is taken for an unambiguous good. In business, bold new ideas that change the way people think about an industry and its products often come from outside of more conservative established firms, from upstart independents unafraid of taking risks. (Newman, 2011: 3)*

Thus for Newman, an important aspect of this indie philosophy is not just innovation, but the origins of this innovation – the underdog or 'upstart.' King (2005) talks further about the concept of indie in cinema, noting how it might refer to style or being 'cool' – a social identity:

> *To an extent, the diminutive 'indie' is simply a synonym for independent with an added connotation of fashionable cool. But it also functions as a mystification of the more straightforward category 'independent.' This mystification diminishes or makes vague the significance of economic distinctions and injects added connotations of a distinguishing style or sensibility and of a social identity. The introduction of 'indie' also allows for a separation between a strict and loose sense of the idea to which both 'indie' and 'independent' make reference, so that something might*

> *seem indie without actually being independent by whatever strict definition one adopts, or alternately might be independent by that definition without seeming indie. (Newman, 2011: 7)*

So, there may be indie games that are not created by truly independent developers and there may be games created by independent studios, that do not seem indie. An argument is present here that the degree of importance placed on actual independence is malleable. However, Martin and Deuze (2009) argue that most of which is termed indie in the videogames industry should not be compared to other media forms of indie such as film, as it does not include an 'oppositional logic' to challenge or negate mainstream games. It is argued that in terms of the videogames industry, the notion of the indie is merely the enablement of wider participation in the creation and development process, and as such it is not useful to try and determine what is and is not indie:

> *In light of the structure of the global games industry and in response to these conceptions of alternative media, it may be more valuable to reframe the question of ''what is indie?'' to ''how indie is it?'' (Martin and Deuze, 2009: 291)*

As such, and to paraphrase Martin and Deuze (2009), as has been discussed earlier, indie might best be considered by *how indie it is*. This argument is not an isolated perspective, as Newman (2011: 11) notes in discussing indie cinema, films can be considered on a 'spectrum captured by the term indie. Thus some films might be stronger or weaker examples of indie cinema; some are more central, and some more peripheral or problematic.'

Whilst indies may be assumed to be developers free of publisher funding, it must be recognised that this may well not be the case and is typically not the sole criteria by which they may be determined or judged. Being aware of this distinction is important because it has ramifications for developers, publishers, consumers and academics looking for strict definitions where they may not exist. For example, *Valve*'s *Steam* has an indie genre category for some games, within which there are many games created by studios that are certainly not independent, yet these games may be perceived as indie by *Valve* and consumers alike. It *can* be argued that an indie game can only be created by an independent developer - one that is independent from and therefore not beholden to a publisher. However, whilst this strict definition may prove a defining rule for some, it perhaps loses much nuance that could otherwise be explored such as art style,

development methods and budget that for many contribute to the concept. A helpful perspective that also takes into account the earlier points raised by Martin and Deuze (2009), Costikyan (2000, 2005), King (2005) and Newman (2011) is offered by Juul (2019).

Juul's (2019) work is perhaps best described as a historical evaluation of indie in terms of titles, genres, and aesthetics with a significant devotion to individual titles and elements of indie style. But there is almost an obsession with defining what is meant by the term 'indie'. In evaluating the meaning of indie, he argues that games can be indie in three ways: financially independent, aesthetically independent, and culturally independent. Financially in terms of self-sufficient, aesthetically in terms of choosing a different visual style to mainstream and culturally in terms of different ideas and values from mainstream. In the main, these arguments align with those put forth by those cited above - but not wholly. Juul (2019) argues that cultural values and ideas that are independent can be seen in videogames, yet Martin and Deuze (2009) do not see this similarly. Perhaps this difference stems from a ten year gap between their work – indeed, there have arguably been few videogames lauded as culturally indie in the sense of oppositional logic, but nevertheless there have been a small number of notable titles more recently (cf. Kunzelman, 2020). However, where Juul's (2019) arguments do align are in terms of aesthetic and financial independence. Firstly, an aesthetic independence can be seen in art or audio style and can be perceived as indie, without any reference to the cultural values or financial situation of the developer; an indie 'style.' This satisfies the arguments of King (2005) and Newman (2011) insofar as they may have, for example, a 'connotation of fashionable cool.' Secondly, and perhaps most pertinently to this thesis in terms of its focus on entrepreneurship and new venture creation by indies, is the idea of financial independence. The self-funding developer is considered indie. In this regard, Juul (2019) sees the indie as being in charge of their own destiny, with 'the capability to make games more personal in the absence of a publisher holding monthly sprint goals over their head' (Kunzelman, 2020). As such, it is here in the self-funding, financially independent indie that this thesis rests to evaluate new venture creation.

Appendix 2: Example narrative extracts

Interviews were conducted with six participants. Total transcription exceeded 62,000 words. The two extracts below indicate questioning of when the participant used the term indie.

AUTHOR: What does being an indie mean? 'What does it mean, indie?' 'What was it that made you think you were indie – whatever that is?' and 'Do you think you're still indie now?'

ALEX: I think... so, the biggest difference for me was not having to ask permission. So my whole career prior to that, especially working for an independent developer, was needing to pitch things to a publisher, was needing to - or respond to a request for a pitch from a publisher, have things signed off - pitches, budgets, things signed off and for me a lot of the frustration from that world was that the level of innovation was very minimal because the game was going to take, well now I mean a good game could take 5 years to make so you're pitching to a publisher that's looking at the market now and you're pitching them in five years' time this thing will be ready and so generally you're looking at a game or a genre that exists right now and you're promising some level of tweak, but nothing too risky and erm... for me that was but that's like the chicken and egg because you need the money from the publisher to go make the game.

So that for me is the non-indie world, is a lot of decisions are driven by marketing and sales when you're dealing with those budgets and the corporate publishers you know obviously some of the creative process is, is err... you know diverted or perverted from what it might be and so for me what and with [my first title] knowing that this might be my only indie game if it didn't work like I was keen to push that as hard as possible. So, err... in the case of [my first title] was purely up until indie Fund it was funded by myself... err... and which was essentially me going 'this is how much money we have saved up, my wife is going to work. we were in a very cheap town in England, so this, this, this is the... pretty much 12 months is all we got.' And then in terms of coming up with that idea, for me the golden kind of check was, 'would a publisher back this?' and the answer clearly with [my first title] was clearly no. No publisher in their right mind would have gone for that pitch, but it was doing something that I thought was interesting and again like that's the scale of the economics for me was like, you know, [my first title] was essentially a... I had very little outside help. So essentially with [my first title] it was self-published with essentially 100%

of the revenue coming back to me, you know, if that game doubles its money, that's hugely rewarding financially for me and very you know reproduceable. So the economics become you know, wildly different. Especially with digital, I think the key difference was once digital distribution became a viable option, you cut out so many middle-men that you can say 'I'm going to make a game that will break even if I sell 20,000 copies and if I sell 100,000 copies it's paid me a wage [laughs] and if it sells a million copies, then I've made a nice amount of money. And so suddenly the kinds of ideas and games you can make shift radically and become more interesting. So for me, I guess that is what it means to be indie.

So then when I went on to make [my second title], which was funded by a publisher I think spiritually this was still an indie game - I still made it mostly in my own kitchen when I pitched it to [the publisher], I… this it was not a sexy sales pitch, it was 'this is the game I want to make - warts and all. These are the things that are weird about it, these are the things that are interesting about it to me, and you know it was not an attempt to sell something to a publisher. I was not responding to their request to pitch. And then the development of it - one of the nice things about [my first title] was having come off these bigger games for publishers like making something like [a game of well known-IP with significant budgets] which is a hugely ambitious piece of storytelling, was greenlit and signed off a 10 page document, because at that point the developer is not funding any huge investment in a pitch to a publisher, you know when you're pitching 100 to a public... you know if you spend a lot of money on every pitch you do to a publisher, you spend all your money. But the point where the game's greenlit, now the independent developer needs to suddenly ramp put the team. So you want to get the team of 50 people up and running as soon as possible so you can't start billing and making money off this thing. So, off of a 10-page document immediately me and the other writer are now trying to create the story, at the same time people are building level grey boxes, designing game mechanics, character concepts, building characters… erm, which is not the ideal way to construct something like that.

So with [my first title] I gave myself 6 months of development time... with [my first title] being the first indie one, not only was I trying to make a game that felt different, but making it, trying to make it in a different way. So spending a lot of time up front and I think it was like 6 months in that case, on paper, planning this thing, doing a lot of research, constructing the story, figuring out what I wanted the experiences to be, without that whole thing of kind of laying the track as you're kind of moving. And then similarly with [my second title], again when I said that was like spiritually an indie game despite having that

funding, erm... ... we did a lot of upfront research and story work and things on paper in a way that I think if it had been a bigger publisher an [example large publisher] or someone, that process that you're bound to as a developer of milestones, milestone deliverables, I don't know if they'd have been comfortable with a schedule that said like for 6 months you will see very little [laughs] it will be Alex in a room staring into space, occasionally writing notes and stuff and reading lots of books and things. But that for me was like a very useful part of the process. So I think that for me erm, and you know again, like the ... despite [my second title] being... [redacted]… some of the features we're implementing, it was like very much not a conventional videogame and was exploring areas that most videogames have not explored, so in that sense was riskier than perhaps you'd be allowed to get away with, I think. You know, you're not, you... if you're working for a more, a larger scale publisher, I think you're allowed to innovate subject matter, maybe a little bit of gameplay innovation maybe a little bit of err like business model innovation if you're trying out some of the new ways of monetising things, but you wouldn't necessarily do all of them at once. So I think, continuing to explore new game mechanics, plus new subject matter - that I think err, confines that kind of erm, indie spirit.

AUTHOR: So what does indie mean to you?

RAY: So indie is kind of a strange word because it has meant multiple things over the past few years, but when I started in games around 2010, indie was sort of a dream of independence that nobody knew they could do, right? It was relatively new the idea that you could make games on your own and I think for most of us the beacon was Daisuke Amaya's Cave Story. Which was this game made by one guy in his bedroom over 5 years and it was a phenomenal platformer. It was incredibly good, it was freeware and it felt like a real game, right? It felt like if somebody had made this and sold this, I would have bought it for sure. But the fact that he could do that for a lot of us, like was sort of like the inspiration to do this , like sure around that time there was Fez in development and there was Braid by Jonathan Blow there was Super Meat boy by Edmund McMillen and Tommy Refenes but all of those felt like not necessarily our story, right these were like big polished games by people who've been in the industry or who have like money via grants or I don't know what. There was always Pixel's game that made us think that we could do this, I think.

So, for the start indie was actually a very small group of people, I think. It might have been like, maybe 100 people worldwide that were doing this indie thing and most of them were

people that just accidentally started making games. Most of them were young - like they must have been between like 15, maybe 13 years old to and like 25-30, no not even 30, maybe 25 at the oldest. And they were all making games in this weird bubble of counterculture. I think that's where the first defined shape of indie comes from like Pixel's Cave Story was still very much just a videogame - it was a very good videogame - but it didn't have any distinct counter-culture flavour to it. Early in the - or at least I think I prefer cause like the 2nd generation of indie - the 2nd generation of indie was the first like culturally distinct group of independent developers. They had a way of talking, they had their priorities, they were very much a 'games should be games again' movement; narrative was sort of like frowned upon because it was the thing the big AAA's were all focusing on. So even though all of them wanted to make interesting worlds, they were very critical of the lack of mechanics that was used in those worlds to tell those stories. So I think the first distinct indie culture was just the counterculture, it was just people upset with videogames not being about mechanics and this weird, misguided nostalgia for better times or something maybe... maybe they were a little conservative. But it all came from a place that tells stories that weren't being told before - in that sense they were very progressive as well. And because they were kids, they didn't really need to earn any money, so money was kind of frowned upon as well. And then accidentally people started making money. And then you know by the time I came around I must have been one of the earlier people on the scene that was like "Oh I do want to get a - can we please just earn money?"

But up until that time, most of the indie scene was actually built around Flash, Flash portals was the big thing, it was the way you earned your first money, it was the way you got some money to do your big game, the game you really want to care about. So, yeah, I think that's kind of where we started, that slowly started evolving but if you asked me where indie started that would be it. If you asked me what indie is, that’s a bit more complicated, because that first group started expanding over time as more of us found success, more of us believed it was possible and the thing with culture is that no matter how strong a culture is, if there is... if it's a beacon, it becomes an icon, right? And if it becomes an icon it... the only purpose of an icon is to be torn down, by whatever comes next? And I think for a lot of those early indies, most of them no longer are... no longer sort of have the mythological status that a lot of them had for a few years because now indie is so big that most people don’t have to like, they don’t have to know those people, they don’t have to be aware of that history anymore. Now it’s just this notion that anybody can make a videogame.

So I think indie as a sort of culture shifted towards this... this community building thing. It's less about making the kind of games you're making or whether it's counterculture or whatever, I think now indie is a very constructive term, it's a word for people that both want to make independent games but also want to be part of building a community locally that encourages other people to make games. I actually think Scott Benson of 'Night in the Woods' - I think it was him that summarised it - but it was basically "make games, pay rent, help others make games pay rent." I think is currently the best explanation that exists for indie. I think most people that aren't part of that community building tend to refer to themselves as independent. As like, you know... like an actually distinct phrase.